BC STATS

MINISTRY OF ENVIRONMENT

BRITISH COLUMBIA'S FISHERIES AND AQUACULTURE SECTOR

April 2007

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Introduction

This is the fourth edition of a report on the fisheries and aquaculture sector, commissioned from BC Stats by the Ministry of Environment. The first report, which was released early in 2000, presented estimates of gross domestic product (GDP[1]), revenue, employment and earnings in the province's fisheries and aquaculture sector for the period from 1984 to 1997. Also included were data on international trade in fish and seafood products, as well as counts of the number of fishing-related establishments in the province for selected years.

The initial report represented the first-ever attempt to provide an overview of all four components of the province's fisheries and aquaculture sector, which includes the following industries:

- Commercial fisheries;
- Aquaculture (fish and shellfish farming);
- Fish processing; and
- Sport fisheries (freshwater and saltwater)

The report was the first to put all four component industries in the sector on a consistent footing, using standard concepts and data similar to those used to assess other sectors such as forestry, agriculture, tourism and high tech. This made it possible to assess the overall size and economic impact of the fisheries and aquaculture sector relative to other industries, and to identify emerging trends in the sector. The ability to measure the performance of the sector vis-à-vis the rest of the economy will provide a basis for a better understanding of the current structure and long-term prospects of British Columbia's fisheries and aquaculture sector.

What's new in this report?

This edition of the report updates the previously published information, and extends the data to the year 2005. Revisions to underlying data series used to calculate the estimates have been incorporated, and as a result, some of the historical data has been revised since the last issue was published. Because the methodology used to produce the estimates in this document has only recently been developed, it is likely that the data for the fisheries and aquaculture sector will continue to exhibit some variability. It typically takes a few iterations before a methodology for producing estimates becomes completely stable. The remainder of this paper presents the results of the study, including an overview of the sector and each of its component industries. A brief summary of the methodology used to derive the estimates has also been included.

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[1] *GDP is a measure of the value added by an industry or activity to the economy. It is equal to total revenue from the sale of goods or services produced by the industry less the cost of materials and purchased services consumed in the process of production.*

Highlights

BC's fisheries and aquaculture sector generated $798 million of the province's gross domestic product in 2005

- The fisheries and aquaculture sector generated $798 million of the province's "real"[2] gross domestic product (GDP) in 2005[3]. It accounted for less than one percent (0.6%) of BC's total GDP at basic prices, which reached $131 billion in that year.
- Compared to other industries, the sector is relatively small. As a whole, the resource-based industries (agriculture, fishing, forestry, mining and related processing activities) accounted for $19.8 billion, or about 15% of the province's total GDP in 2005.

Table 1[4]

Gross domestic product ($1997 million)	1984	2004	2005	% of total, 2005	% change since 1984
Fisheries & aquaculture	***575***	***728***	***798***	***0.6***	***38.7***
Commercial fishery	148	126	103	0.1	-30.2
Aquaculture	3	189	274	0.2	8,992.3
Fish processing	172	169	173	0.1	0.8
Sport fishing	253	245	248	0.2	-2.1
Goods sector	21,830	33,825	35,135	26.7	60.9
Service sector	46,530	92,832	96,112	73.1	106.6
Total, all industries	***68,189***	***126,857***	***131,440***	***100.0***	***92.8***

- The largest industry within the sector is aquaculture, generating a total GDP of $274 million in 2005. Sport fishing ($248 million), fish processing ($173 million), and the commercial fishery ($103 million) made smaller contributions to BC's GDP.
- Both goods and service-producing industries are included in the fisheries and aquaculture sector. The commercial fishery, aquaculture and fish processing industries are part of the goods sector while sport fishing activities are included in the service sector.

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[2] *Except for special sector estimates (for tourism, high technology and sport fishing, which are in constant 1997 dollars) the GDP data in this document are reported in chained 1997 dollars. This means that they have been adjusted to eliminate the effect of price and quantity changes over time. Current dollar estimates, which are not adjusted for inflation, may grow or shrink as a result of price and quantity changes as well as changes in economic activity.*

[3] *The data presented in this paper is based on information available as of October 2006.*

[4] *1984 is the first year for which comparable GDP data is available for all industries, and is used as a reference point for long-run comparisons.*

Goods and service producing industries

Commercial fishing, aquaculture (both finfish and shellfish farming) and fish processing are all part of the **goods-producing sector**, which includes industries that produce a tangible product, such as forestry, agriculture or manufacturing.

Sport fishing is part of the **service sector**. Service industries do not produce a tangible product. Instead, their output is a service such as retailing, financial services, or accommodation. In the case of the sport fishery, the service provided is the sport fishing experience–everything from guiding to boat rentals or accommodation for recreational anglers.

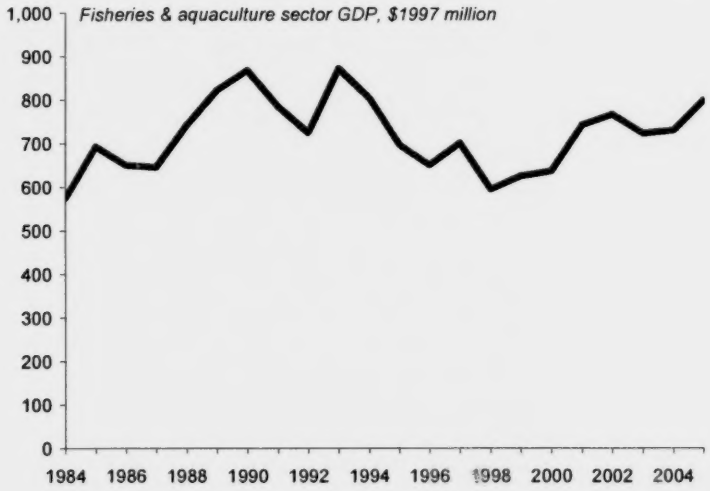
- The tourism and sport fishing industries overlap, but not completely. A significant percentage of all sport fishing activities is tourist-related (and therefore attributed to both the tourism and sport fishing industries). This includes the GDP related to guiding, transportation, accommodation, food and other services provided to anglers who are also tourists, as well as that which is attributable to non-angling related activities such as visiting attractions or shopping.

What is Gross Domestic Product (GDP)?

GDP is a measure of the *value added* by an industry or activity to the economy. It is calculated by subtracting the cost of materials and purchased services consumed in the process of production from total revenues received from the sale of goods or services. GDP is one of the two basic measures used to compare the performance and relative size of industries in an economy. The other commonly used measure is employment.

GDP is preferred over other measures such as revenues because it includes only the value attributable to the activities that occur in an industry and thus avoids the problem of double-counting the value of goods and services consumed in production

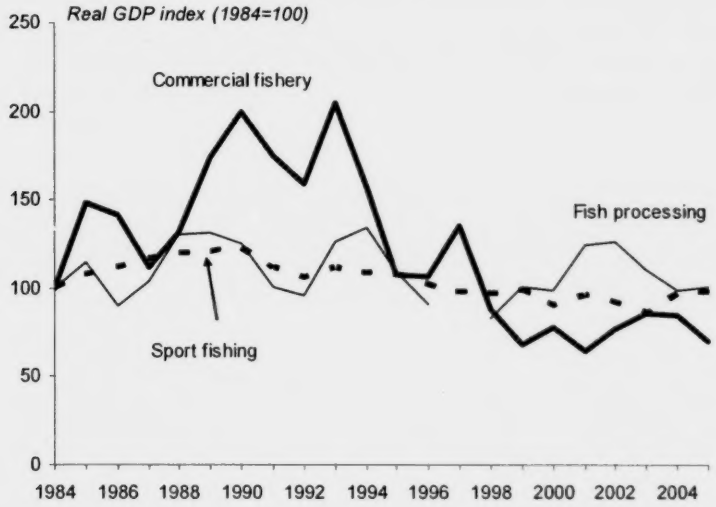
Fisheries and aquaculture back on an upward track after declining in the 1990s



Source: BC Stats
Figure 1

- The fisheries and aquaculture sector experienced a period of decline during the 1990s but has been making a comeback, regaining much of the ground lost during the last decade. Despite stronger growth in recent years (GDP increased 10% in 2005), the sector's output remains well below levels reached in the early 1990s.
- British Columbia's economy is becoming increasingly dependent on service industries rather than goods production, and the relatively slow growth of the fisheries and aquaculture sector reflects this trend. Since 1984, the sector has expanded 39%, less than the 49% average for all resource-based industries and well below the 93% increase for the economy as a whole. Although other goods-producing industries have fared better (between 1984 and 2005, GDP originating in the goods sector increased 61%), service industries have been the main engine of growth in recent years. GDP in the service sector has more than doubled (+107%) since 1984.
- Government initiatives to reduce the number of salmon fishing licences, together with a decline in the stock of salmon available for harvest, had a big effect on the commercial fishery during the latter half of the 1990s, and GDP data reflects this dramatic decline. The effect of the downturn in the salmon fishery was only partly mitigated by a greater focus on harvesting other finfish and shellfish species.
- GDP in the commercial fishery fell in 2005, dropping to 18% below the level recorded in 2004.

The commercial fishery has been declining[5]



Source: BC Stats
Figure 2

- Despite some ups and downs during the period since 1984, GDP in the fish processing industry was at virtually the same level in 2005 as it had been twenty years earlier. The fish processing industry posted a 3% increase in 2005.
- By 2005, GDP in the sport fishing industry had fallen to slightly below the 1984 level, but the industry shows signs of improving, with a 1% advance between 2004 and 2005.
- Offsetting the weakness in the rest of the sector was a substantial rise in the value of aquaculture activities in the province, as the output of the finfish and shellfish farming industry has continued to expand. BC's aquaculture industry is the biggest in the country.
- Most of the recent improvement in GDP in the fisheries and aquaculture sector can be attributed to strength in the sport fishing and aquaculture industries. In 2005, a 45% jump in the aquaculture industry's GDP helped boost the sector's overall growth to 10%.
- The aquaculture industry generated $274 million of the province's total GDP in 2005. In real terms, the industry has grown by nearly a factor of 100 since 1984, when its GDP was just $3 million. Most of the growth originated in the salmon farming industry, which dominates the aquaculture sector, although other types of seafood farming have also seen very significant growth since 1984.

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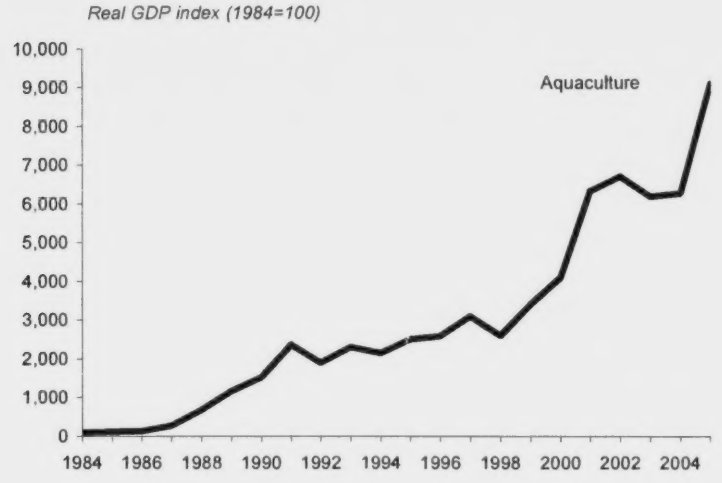
[5] *Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement.*

Strong growth in BC's aquaculture industry continues to boost the sector's overall performance



Source: Statistics Canada and BC Stats
Figure 3

More than 15,500 British Columbians were employed[6] in the fisheries and aquaculture sector in 2005

- An estimated 15,500 British Columbians worked in the fisheries and aquaculture sector in 2005. Sport fishing (7,700) was the largest employer, followed by fish processing (3,700), aquaculture (2,100), and commercial fishing (2,000).
- Less than one percent (0.7%) of all the people with jobs in British Columbia work in the fisheries and aquaculture sector. By comparison, agriculture and related food processing activities employed 3% (64,400[7]) of the workers in BC, while the forest sector provided about 4% (79,700) of the jobs in 2005.

Employment declined in 2005 as all industries except aquaculture reduced their workforce

- Employment in the fisheries and aquaculture sector dropped 10% in 2005, as most industries reduced the size of the workforce. The biggest declines were in the commercial fishery (-28%) and in fish processing (-25%). After a big increase in 2004, the number of people working in the sport fishery dropped 3.1% in 2005.
- The number of people working in the province's aquaculture sector jumped by nearly a third, rising to an estimated 2,100.

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[6] These employment figures are based on information from the Labour Force Survey. They do not distinguish between full-time and part-time workers. The Labour Force Survey numbers were used because they allow for comparison with other industries. Previously-published employment figures from other studies of the commercial fishery and fish processing may differ because they rely on other data sources.

[7] Excludes aquaculture, which is reported as part of the agriculture industry in the Statistics Canada tables.

- In 2005, the number of jobs in the fisheries and aquaculture sector was only 2% higher than in 1984. The fish processing industry (-10%) and the commercial fishing industry (-51%) have fewer jobs than in 1984. On the other hand, employment in sport fishing has grown 25% and the number of people with jobs in aquaculture has more than doubled (+137%) over the same period.

Table 2

Employment ('000)	1984	2004	2005	% of total, 2005	% change since 1984
Fisheries & aquaculture	***15.2***	***17.2***	***15.5***	***0.7***	***2.0***
Commercial fishery	4.1	2.8	2.0	0.1	-50.7
Aquaculture	0.9	1.6	2.1	0.1	137.1
Fish processing	4.1	4.9	3.7	0.2	-9.8
Sport fishing	6.1	7.9	7.7	0.4	25.3
Goods sector	322.5	436.9	452.7	21.2	40.4
Service sector	925.5	1,625.8	1,677.8	78.8	81.3
Total, all industries	***1,248.0***	***2,062.7***	***2,130.5***	***100.0***	***70.7***

Revenues reach $2.2 billion in 2005

- Revenue[8] from sales of fish and seafood products, as well as services provided to recreational anglers were $2.2 billion in 2005. Of this total, $362 million was directly generated by the commercial fishery, $338 million from aquaculture activities, and another $638 million from fish processing. Sport fishing activities generated an estimated $865 million in revenues during 2005.
- Total revenue in the fisheries and aquaculture sector more than doubled (+123%) between 1984 and 2005. Because revenue is reported in current dollars, this increase reflects the effects of inflation, as well as volume changes over time.
- Within the sector, the strongest growth has been in aquaculture, where revenue has increased from $3.2 million in 1984 to $338 million in 2005.
- All industries in the sector have seen growth over the longer term. In sport fishing, revenue has increased 145%, while the commercial fishery (+50%) and fish processing (+64%) industries have posted smaller gains.

Fish and seafood products exported from BC were valued at nearly a billion dollars in 2005

- Exports of BC fish and seafood products totaled $996 million[9] in 2005, an increase of 1% over the previous year and 40% more than in 1988 (the first year for which export data are available).

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[8] *Revenue figures for the commercial fishery and aquaculture industries are based on landed values.*

[9] *This total includes fish and seafood-related products such as fish meal.*

- International shipments of wild, commercially caught fish and seafood products accounted for the bulk ($676 million) of total exports. The value of aquaculture (mainly farmed salmon) products shipped throughout the world was $310 million.
- Exports of wild finfish were down 7% in 2005, as international shipments of wild salmon fell 14% and halibut (-38%) exports dropped to their lowest level since 1997. Herring exports were relatively flat (+1%) but international shipments of other finfish rose 8%. Wild shellfish shipments were down 9% in 2005.
- Aquaculture product exports improved in 2005, with their value rising 26%, largely due to an increase in the value of farmed salmon (+26%) products shipped to the US and overseas. The value of farmed shellfish exports have tripled since 1988, but accounts for a relatively minor share of total exports.
- The US is British Columbia's biggest market for fish and seafood products, and was the destination for $532 million (53%) of the $996 million worth of fish and seafood products exported from the province in 2005. Japan, at $218 million (a 22% share) is the next-largest market, while the European Union (EU) purchased $71 million of fish and seafood products from British Columbia producers. Other countries accounted for another $175 million of international shipments from BC.
- The value of fish and seafood exported from BC has been more than twice as high as its imports of these products in recent years. The total trade surplus for fish and seafood products was $564 million in 2005.
- The province has a trade surplus in fish and seafood products with the US (+$358 million), Japan (+$214 million) and the EU (+$59 million), but imported $67 million more fish and seafood products from all other countries than it exported to them in 2005.

1. Defining the fisheries and aquaculture sector

The definition of the fisheries and aquaculture sector used in this report was derived in consultation with the Ministry of Environment. It covers the activities of the following industries, which are described in more detail below:

- Commercial fishing;
- Aquaculture (fish and shellfish farming);
- Fish processing; and
- Sport fishing (freshwater and saltwater)

Classifying industries

The industry definitions used in this report come from the 1997 North American Industrial Classification System (NAICS), which is now used by Statistics Canada to classify virtually all of the industrial data that it publishes. Previous editions of this report were based on the NAICS and the 1980 Standard Industrial Classification System (SIC).

Commercial fishing includes all establishments primarily engaged in the commercial catching or taking of finfish, shellfish and other marine animals or plants from their natural habitats.

Aquaculture includes all establishments primarily engaged in farm-raising finfish, shellfish, or any other kind of aquatic animal or plant. These establishments use some form of intervention in the rearing process to enhance production, such as keeping animals in captivity, regular stocking and feeding, and protecting them from predators.

Fish processing includes all establishments primarily engaged in canning seafood, including soup; smoking, salting and drying seafood; preparing fresh fish by removing heads, fins, scales, bones and entrails; shucking and packing fresh shellfish; processing marine fats and oils; and freezing seafood.

Sport fishing includes the sport fishing-related activities of all establishments that sell directly to anglers. This includes operators in the transportation, accommodation, food and beverage services, boat and sporting goods retailing, marinas, and other recreation industries. Consistent with the way in which the tourism sector is defined, some of the output associated with the non-fishing activities of recreational anglers who are also tourists in the province (for example, visits to tourist attractions) is attributed to the sport fishing industry. Sport fishing is thus a special aggregation of various service industries that includes only those services that are sold directly to anglers.

2. Why do we use GDP to measure the size of an industry?

Many people think of an industry's value in terms of its total revenue (e.g., the landed or wholesale value of the fish catch) or the volume of goods or services it produces. However, in this document, GDP is used as the basis for assessing the contribution made by an industry. GDP is the measure of economic activity that is most commonly used to assess trends in the economy and to compare the size of various industries. The reasons why GDP is preferred over revenue are discussed below.

The value of goods purchased from other industries is counted more than once when revenue is the basis for comparison

Comparisons based on revenue (or the value of production) are not always meaningful because of the complex interrelationships that exist among industries. When goods produced by one industry are used as inputs by another one, their value ends up being counted in each industry's revenue every time they change hands.

This can be illustrated using an example from within the fisheries and aquaculture sector. Consider a fish boat owner with a salmon catch valued at $100,000. Suppose that the value of the catch is enough to cover operating costs, and to give the owner a return on his or her investment of $30,000.

Suppose further that the boat owner sells the catch to a fish processing plant, which then turns it into canned salmon that is sold for $180,000[10]. This amount is enough to cover the costs faced by the processing plant operator, including the value of the salmon that is purchased, the cost of materials, supplies and labour used to produced the canned fish, and a return on his or her investment.

The cost structure faced by both the fish boat owner and the fish processor is summarized below.

Fish boat owner	
Total revenue (value of catch):	$100,000
less total costs:	
fuel	$30,000
other supplies and services	$10,000
wages	$30,000
equals: profit (return to owner)	$30,000

[10] *This example is for illustrative purposes only, and is not meant to reflect the actual cost structure in the fishing or fish processing industry.*

Fish processor	
Total revenue (value of sales):	$180,000
less total costs:	
salmon purchased from boat owner	$100,000
fuel, electricity, other services	$20,000
tins, labels, other materials	$10,000
wages	$30,000
equals: profit (return to owner)	$20,000

In this example, the total revenue of the two firms is $280,000. However, note that the value of the salmon catch has been counted twice. First, by the fish boat owner who sold it to the fish processor and second, when it was built into the price for which the canned salmon was sold.

Revenue figures provide useful information on the total amount of money that changes hands, but they should not be used as a basis for comparing the size of industries because the value of goods that are purchased and used by other firms is counted every time they change hands. When revenue is the basis for comparison, the industry at the beginning of the chain (fishing, in this example) by definition must be smaller than any of the industries (such as fish processing) that use its products, because the cost of purchased products is always built into the final price charged by producers. This happens even if the value added by the initial industry is larger than that in industries that process the raw materials. As a result, inter-industry comparisons that are based on revenue can be very misleading.

GDP avoids this pitfall

With GDP measures, the value of a good or service used in production is counted only once, and is attributed to the producing industry. By eliminating the double counting of inputs, it is possible to compare, across industries, the contribution to the economy made by various economic activities.

What is GDP and how is it calculated?

Gross Domestic Product defined

GDP is a measure of the *value added* by an industry or activity to the economy. It is equal to total revenue from the sale of goods or services produced by the industry less the cost of materials and purchased services consumed in the process of production.

GDP measures the value added by an industry to the economy. It is calculated by subtracting the costs of materials, energy, and purchased services (e.g., accounting services or legal advice that is not provided in-house) from the total revenues (or output) of the industry. What remains is the industry's GDP.

Wages; profits and earnings of owner/operators; interest and investment income, changes in the value of inventories/stock held; and depreciation can all be viewed as measures of the value of the work done by the labour and capital employed in an industry and are included in GDP. Indirect taxes (e.g., PST and GST) levied on products purchased by firms are not included. However, taxes net of subsidies on production are included in GDP as it is now measured at basic prices[11].

GDP is not the same as an operating surplus or deficit. Many of the items included in GDP are viewed as costs by businesses. This means that a business or industry could be losing money (i.e., have losses rather than profits) but still have a positive GDP. The GDP of an industry would only be negative if the cost of materials, supplies and energy purchased by a business exceeded the total value of all its revenue. This is possible, but highly unlikely, as it would mean that a business was spending more on raw materials, energy and purchased services than it could expect to realize from sales of its product.

Fish boat owner	
Total revenue	$100,000
less cost of materials & services:	
fuel	$30,000
other supplies & services	$10,000
equals: GDP	$60,000

Fish processor	
Total revenue	$180,000
less cost of material & services:	
salmon purchased from boat owner	$100,000
fuel, electricity, other services	$20,000
tins, labels, other materials	$10,000
equals: GDP	$50,000

Going back to our example of the fish boat owner and the fish processor, the GDP (or value added) associated with the fishing activity would be $60,000 (total sales less the cost of the material inputs and energy used to operate the boat). In other words, the fish boat operator has added $60,000 of value to $40,000 worth of material inputs. Similarly, the fish processor, who purchased $130,000 of supplies and services (fish, cans, fuel, and so on), added $50,000 of value to those inputs. The total GDP associated with their activities is thus $110,000: $60,000 from the fishing activity and $50,000 from the canning process.

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[11] *Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concept is that the factor cost estimate includes all subsidies and excludes all indirect taxes.*

Can GDP figures be compared across industries?

The answer to this question is yes, because GDP values the contribution made by each industry on a consistent basis.

In our fictitious example, the fish boat operator had revenues of $100,000, and generated a GDP of $60,000. The fish processing firm had nearly double the revenue ($180,000), largely because the cost of fish purchased from the boat owner was incorporated into the price of the canned salmon. On the basis of revenue, it would appear that the fish-processing firm was the larger of the two.

But in this example, the value of the work done by the owner and crew of the boat (including the return to capital) was $60,000. In comparison, the value added by the fish processor, who transformed the salmon caught by the boat owner into canned fish, was somewhat lower, at $50,000. In other words, the value of the labour and capital used to catch the fish was slightly greater than that required to turn the fish into tinned salmon.

Using GDP, it is possible to isolate the economic activity generated by each industry even if raw materials and supplies change hands many times during the process of creating a finished product. This is important because many industries in the economy are highly integrated. By using a specific measure like GDP, every industry's activity is measured using the same yardstick.

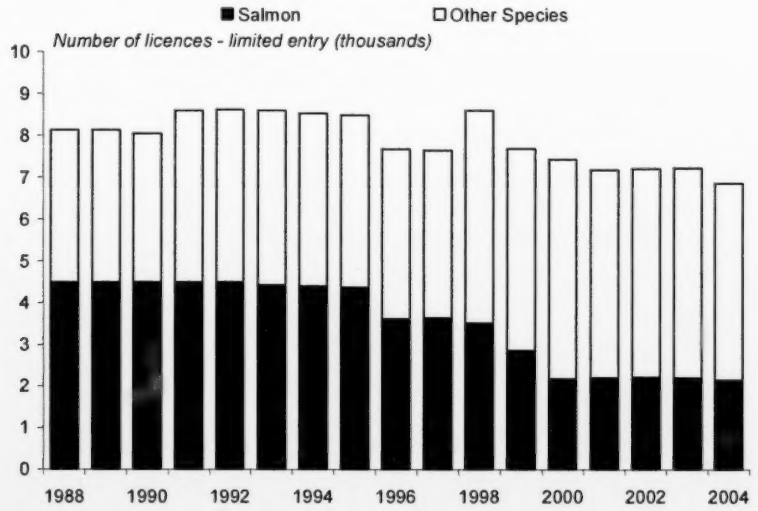
The next few sections of this paper contain overviews of trends in the fisheries and aquaculture sector, and the four industries within it. The analysis in these sections focuses primarily on GDP, but includes a discussion of trends in other economic measures such as employment, earnings and revenue.

3. An overview of the fisheries and aquaculture sector

Fisheries and aquaculture: an evolving sector of the economy

British Columbia's fisheries and aquaculture sector has undergone substantial changes during the last two decades. Historically, the sector was dominated by activities related to the harvest and processing of wild salmon while other species accounted for a relatively small share of the output of the commercial fishery and seafood processing industries. Government initiatives to rationalise the size of the salmon fleet with stocks played an important role in the restructuring of the industry that took place in the late 1990s. The commercial fishery responded to these initiatives by retiring vessels from the active fleet, focussing on the harvest of species other than salmon, and developing new markets for products already being harvested.

Changes in fisheries management strategies have led to a decrease in the number of licences issued for limited entry fisheries[12]



Source: Fisheries & Oceans Canada

Figure 4

Technological advances have led to the development of a growing aquaculture (farmed finfish and shellfish) industry in the province. In the 1980s, the industry focussed almost exclusively on shellfish farming, but is now dominated by finfish, particularly salmon, farming activities. The landed value of farmed finfish and shellfish produced in BC now rivals that of the wild catch.

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[12] *Limited entry fisheries have a pre-set cap on the number of licences available to be issued.*

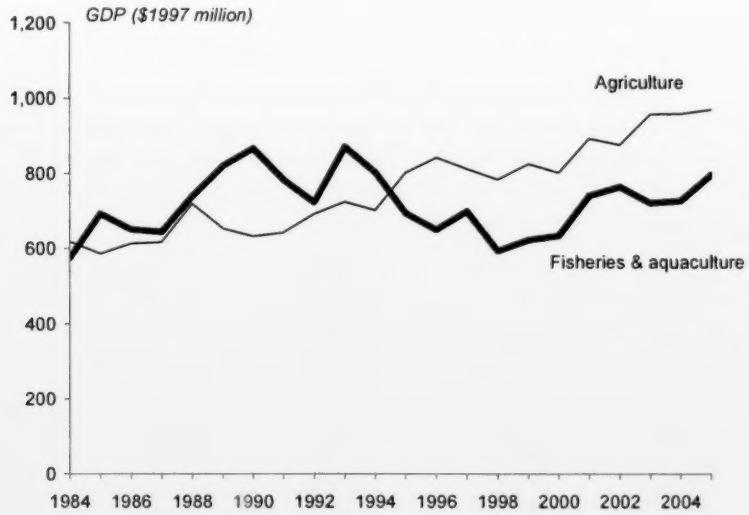
In addition to the goods industries, a variety of businesses catering to recreational anglers operate in British Columbia and sport fishing activities play an important role not only in fisheries and aquaculture, but also in the province's tourism sector.

0.6 percent of British Columbia's GDP originates in the fisheries and aquaculture sector

Real GDP in the fisheries and aquaculture sector (including all four industries) was estimated at $798 million in 2005, accounting for 0.6% of the province's total gross domestic product.

The fisheries and aquaculture sector faced significant challenges during the latter half of the 1990s, when real GDP began to decline, largely due to reduced output in the commercial fishery and fish processing industries. The sector began to pick up speed at the end of the decade, and is regaining some of the lost ground, but remains well below its peak reached in 1993. Despite recent growth, the fisheries and aquaculture sector, which was previously comparable in size to the agriculture industry (excluding related processing activities), is now only 80% as big as this industry.

The fisheries and aquaculture sector is growing, but has yet to regain the ground lost during the 1990s



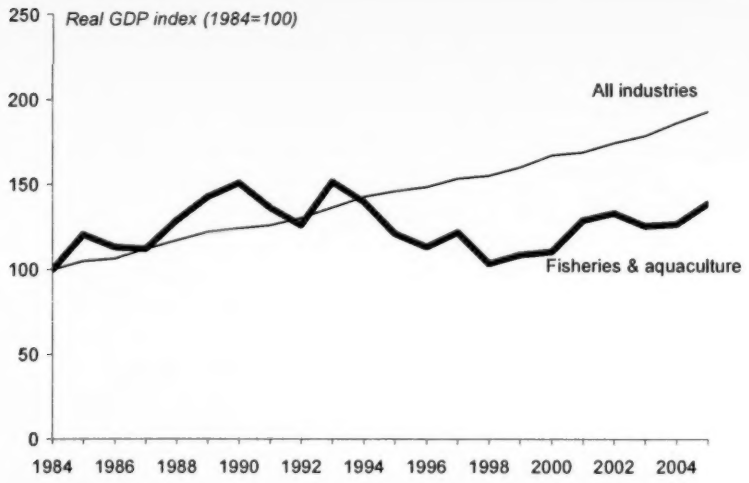
Source: Statistics Canada and BC Stats

Figure 5

In 2005, GDP in the sector expanded 10% largely due to very strong growth in the aquaculture industry (+45%), which offset a downturn (-18%) in the commercial fishery. The fish processing (+3%) and sport fishing (+1%) industries made modest gains in 2005.

Because the commercial fishery, fish processing and sport fishing industries depend on a resource stock that varies from year to year, the fisheries and aquaculture sector displays considerable volatility, growing at faster-than-average rates in some years, and slipping behind the provincial average in others.

The fisheries and aquaculture sector is more volatile than other industries



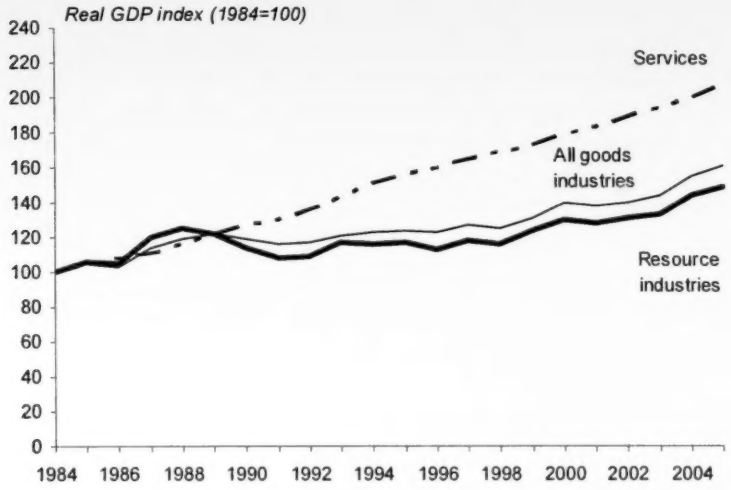
Source: Statistics Canada and BC Stats
Figure 6

Other resource-based sectors such as agriculture and forestry are also subject to big swings. As a whole, goods-producing industries have lagged behind the provincial average during most of the last two decades. Fishing, forestry and agriculture have all made only modest gains, despite very strong performances in some years.

Generally speaking, goods industries, especially those that depend on the extraction and processing of natural resources, tend to experience deeper troughs and higher peaks in output from year to year than do other sectors of the economy. This is partly due to the nature of these industries, as they are subject to a number of externally generated constraints such as availability of supply and changes in world market conditions. These factors also affect other industries, but usually to a lesser extent.

BC's economy, like many others in the developed world, has been shifting away from a focus on resource extraction to a greater service-sector orientation. Three-quarters of the province's total GDP is currently generated by service industries. Since 1984, goods-producing industries have expanded 61%, well below the 107% increase in the size of the service sector. The economy as a whole grew 93% during this period. By comparison, GDP growth in the fisheries and aquaculture sector was much more modest, at 39%.

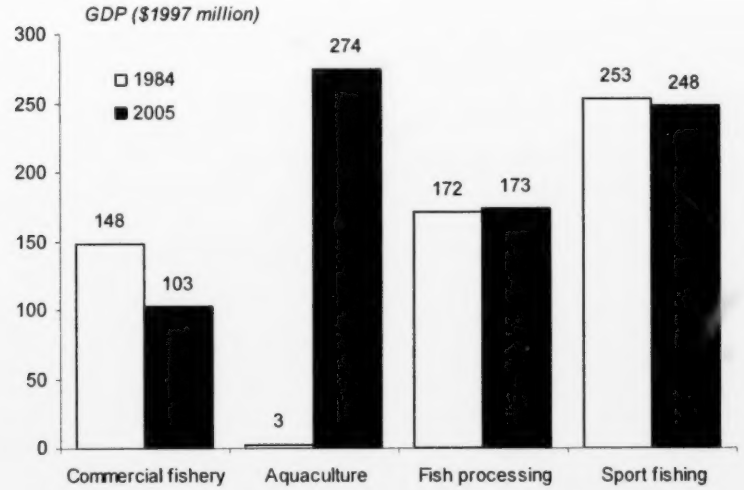
Resource-based industries show considerably more volatility than service industries do



Source: Statistics Canada and BC Stats
Figure 7

Aquaculture now the largest industry in the sector

The aquaculture industry has seen strong growth since 1984, but other industries have not fared as well



Source: BC Stats
Figure 7

Aquaculture, with a total GDP of $274 million in 2005, is now the largest industry in the sector. Behind aquaculture, sport fishing added $248 million to

the province's total GDP, with another $173 million originating in the fish processing industry and $103 million in the commercial fishery.

Over the longer term, these industries have experienced different growth patterns. Real GDP in the sport fishing industry was 2% lower in 2005 than it was in 1984. The commercial fishing industry posted a 30% decline and the fish processing industry was virtually the same size (+1%) as in 1984. In the commercial fishery, the decline occurred during the late 1990s and early part of this decade. Prior to that, the industry was on a strong upward trend. The fish processing industry also experienced declines during the late 1990s, but made an earlier recovery than the commercial fishery did.

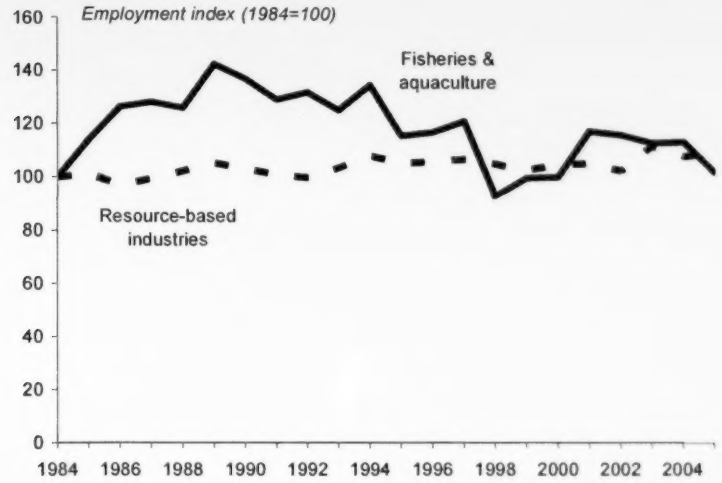
In the sport fishing industry, output has fallen 2% since 1984, but the industry has shown less volatility than other components of the fisheries an aquaculture sector.

15,500 people work in the fisheries and aquaculture sector

Employment (including both full-time and part-time jobs) in the fisheries and aquaculture sector was estimated at 15,500 in 2005. This includes 2,000 workers in commercial fishing, 2,100 people employed at finfish and shellfish farms, 3,700 people in fish processing, and 7,700 workers in the sport fishing industry, which provides half of the jobs in the sector. By comparison, agriculture, food and beverage processing employed 64,400 people, while 79,700 British Columbians worked in forestry and related manufacturing industries in 2005.

Workers in industries supplying goods and services to the fisheries and aquaculture sector (such as trucking companies or feed factories) are not included in direct employment estimates.

Employment in the sector has been declining, but over the long run, it has fared no worse than other resource-based industries



Source: BC Stats
Figure 8

Employment in the fisheries and aquaculture sector was generally on an upward trend during the 1980s, peaking at 21,600 in 1989. Since then, however, the number of jobs in the sector has been declining. Employment fell to a low of 14,100 in 1998 and despite improvements in the early part of this decade, the long-run trend is downward.

Employment Estimates

The employment data in this report are based on information from Statistics Canada's Labour Force Survey, a survey of households. Because of the small number of people who work in industries such as aquaculture or the commercial fishery, slight variations in the sample can affect the data. ***Therefore, the employment figures for the commercial fishery and aquaculture should be used cautiously***. Employment data are probably more robust for the fish processing and sport fishing components of the sector.

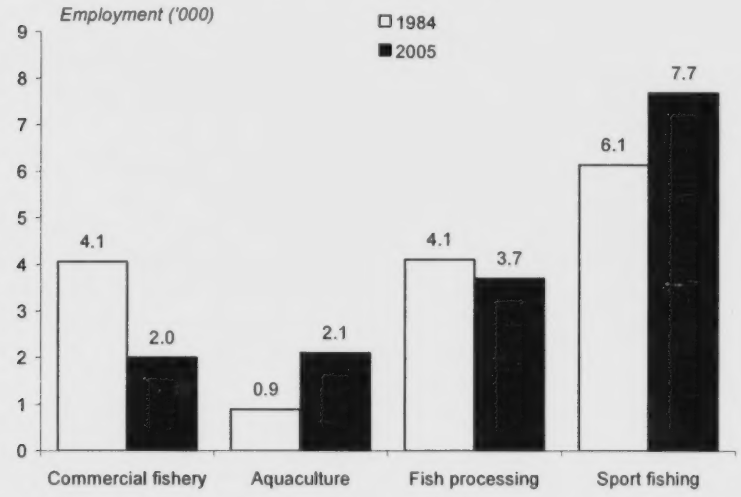
In this respect, the fisheries and aquaculture sector mirrors developments in other resource-based industries. As a whole, the resource sector has seen little employment growth since 1984 even though the number of jobs in the province expanded 71% during this period. Employment in resource-based industries was slightly higher in 2005 (121,000) as it had been in 1984 (111,000). In the fisheries and aquaculture sector, the number of jobs also changed only

marginally over the long run, despite the ups and downs experienced during this period.

The service sector accounted for most of the job growth in the province during the period from 1984 to 2005, with employment increasing twice as fast (+81%) as in the goods-producing industries (+40%).

Within the fisheries and aquaculture sector, employment trends have fluctuated. In the commercial fishery, the number of jobs has been almost halved since 1984, as the industry has undergone some fundamental changes related to conservation measures such as licence buybacks and other programs intended to ensure sustainable fisheries.

More jobs in aquaculture and sport fishing, but employment in the commercial fishery and fish processing has declined since 1984[13]



Source: Statistics Canada and BC Stats
Figure 9

Employment in fish processing facilities has also declined, falling to 10% below the 1984 level. Fish processing activities are linked to the harvesting of the seafood resource and product demands. The decline in the salmon fishery and the growing demand for fresh seafood products (such as lingcod and rockfish) means that more BC seafood is now being shipped directly to market without being processed first. At the same time, fish and seafood processing plants in the province are processing more imported fish from Alaska and other sources, and this has helped reduce the effect of the changes in the commercial fishery.

The aquaculture industry has seen strong job growth since the early 1980s, with the number of jobs more than doubling between 1984 and 2005. While

[13] *These figures include both full-time and part-time workers*

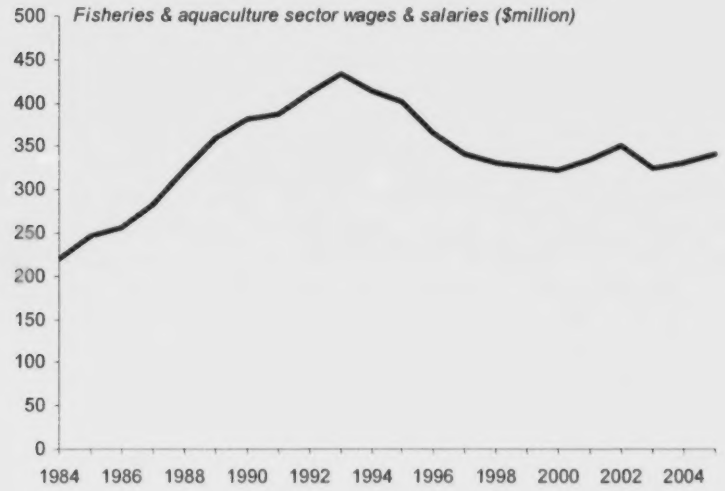
that increase is very strong, and well above the average for all industries, it also falls far short of the eighty-fold increase in GDP seen in aquaculture during this period.

GDP and employment do not always move in tandem, and this is particularly true when new industries are developing. The strong GDP growth in aquaculture has taken place as the industry has undergone a restructuring during the last two decades, shifting away from a primary focus on shellfish farming to a major emphasis on finfish production. Relative to the value of sales, less labour is required to raise and harvest finfish than shellfish, and this is part of the reason for the gap between GDP and employment growth. Technological change has also fostered productivity gains, with some fish farming operations using automated feeding processes rather than manual labour in their operations.

The sport fishing industry has also seen comparatively strong job growth of 25% since 1984. However, this falls short of the 81% gain seen in the service sector as a whole, and is also well below the increase in industries such as accommodation and food services.

Workers in the fisheries and aquaculture sector earned $341 million in 2005

Wages and salaries increased 3.5% in 2005

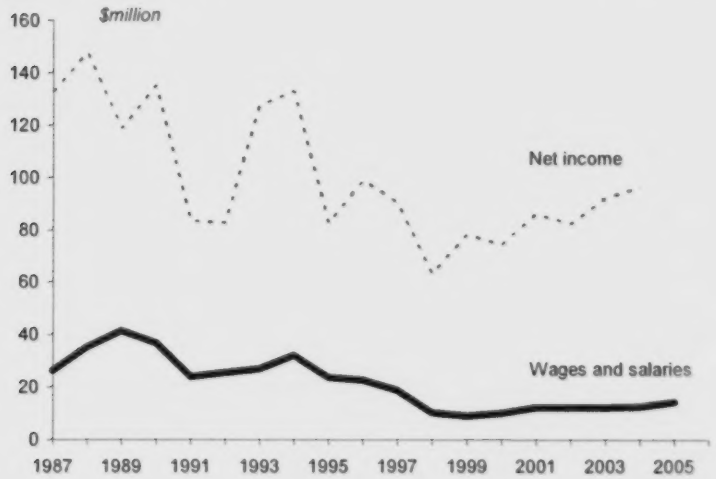


Source: Statistics Canada and BC Stats
Figure 10

British Columbians employed in the fisheries and aquaculture sector brought home an estimated $341 million in wages and salaries in 2005. Workers in the sport fishing ($162 million) and fish processing ($124 million) industries, the largest employers in the sector, accounted for the biggest share of the total wage bill.

Wages and salaries in the commercial fishing ($14 million) and aquaculture ($41) industries were significantly lower. The low wage level in the commercial fishing industry reflects the high concentration of owner-operators of fishing vessels who work in this industry. It is estimated that the net income of owner-operators was just over $90 million in 2005. This income includes both a return on the capital invested by the boat owner, as well as a return for the labour that he or she does.

In the commercial fishery, owner-operators make up more than two thirds of the workforce; they often earn business income rather than wages and salaries



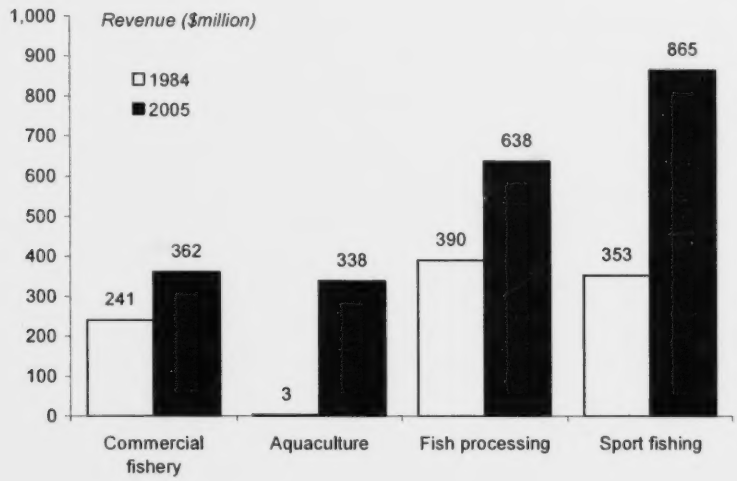
Source: Canada Revenue Agency, Statistics Canada and BC Stats
Figure 11

Revenues reach just over $2.2 billion in 2005

Revenues in the fisheries and aquaculture sector totalled over $2.2 billion[14] in 2005. This compares to revenue of just under $1 billion in 1984. Among the industries within the sector, sport fishing generated the highest revenue ($865 million), followed by fish processing ($638 million), commercial fishing ($362 million) and aquaculture ($338 million).

[14] *All revenue data are in current dollars*

Revenue in the fisheries and aquaculture sector reached more than $2.2 billion in 2005



Source: Statistics Canada and BC Stats
Figure 12

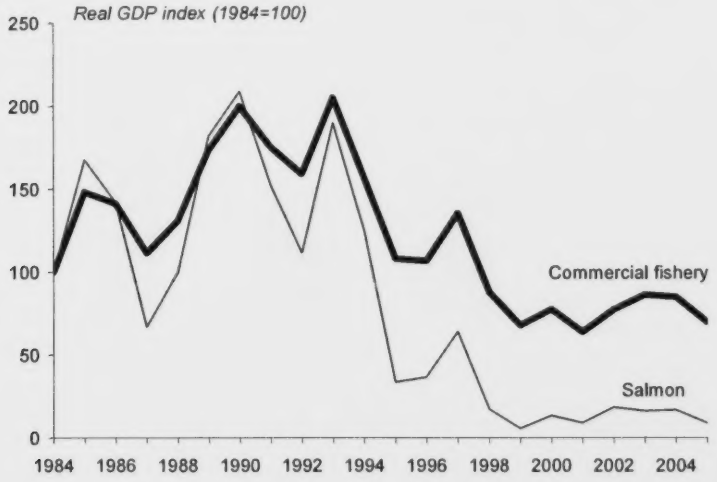
Government revenues originating in the fisheries and aquaculture sector

Comprehensive data on the government revenues originating in the fisheries and aquaculture sector is not readily available. However, sales of freshwater and saltwater angling licences totalled about $17 million in 2004, the latest year for which complete licence revenue data is available. Another $8 million of commercial fishing licences were sold in the province in that year.

Based on input/output model results, which suggest that $60,000 of tax revenues are generated for every $1 million of output in the fisheries and aquaculture sector, an additional $126 million in tax revenues, including personal, corporate and indirect taxes, could be attributed to the fisheries and aquaculture sector in that year. However, these estimates are ballpark figures only.

4. Commercial fishing

Species other than salmon are accounting for a rapidly increasing share of the commercial fishery's output



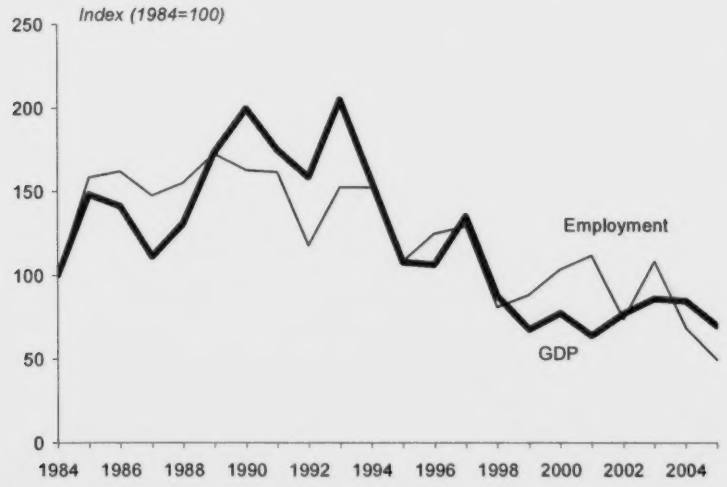
Source: BC Stats
Figure 13

GDP in the commercial fishery fell 18% in 2005, adding to a 2% decline in 2004. The salmon (-46%), herring (-27%) and halibut (-7%) fisheries GDP all contracted, and shellfish harvesting was also in a decline.

The total dollar value of the catch, unadjusted for price changes, fell 8% in 2005, as prices for many of the species harvested in the province declined. In many cases, the volume of the catch was higher than in 2004.

In 1999, the salmon catch dropped to its lowest level in a century and since then has remained well below previous levels. The salmon fishery, which dominated the industry in 1985, accounting for nearly half of total value added in commercial fishing, contributed only 5% of the industry's GDP in 2005. The value added by the commercial fishery as a whole, remains well below the levels seen in the mid-1990s, but over the longer run, most fisheries other than salmon and herring have held their own. The real value added by both the shellfish harvest, as well as the harvest of other finfish species remains at or above 1984 levels. This is largely due to the strength of the halibut, groundfish and shellfish fisheries, where GDP has increased substantially since 1984.

Both GDP and employment in the commercial fishery have been falling



Source: Statistics Canada and BC Stats
Figure 14

2,000 British Columbians work in the commercial fishery

Employment in the commercial fishing industry was estimated at 2,000 in 2005, the lowest number recorded in the past two decades. Employment in the industry had peaked at 7,000 people in 1989.

Although the total wage bill for the commercial fishery was only $14 million in 2005, much of the income received by owner-operators in the industry comes in the form of unincorporated business income. In 2005, more than $90 million in unincorporated business income[15] was attributed to the commercial fishery[16].

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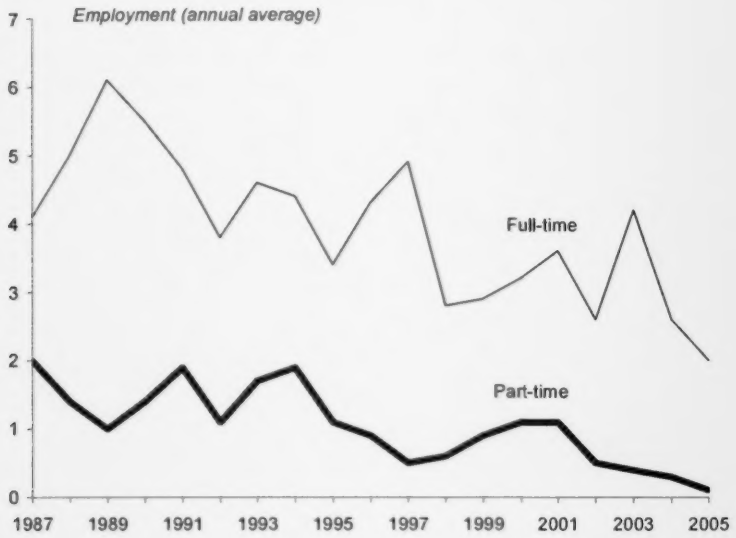
[15] *By themselves, wages in the commercial fishery do not necessarily give a complete picture of the level of compensation received by people working in the industry, as many fishers are self-employed, and do not necessarily draw wages. Unincorporated business income is a measure of the return on labour and capital received by owner-operators of small businesses, of which there are many in the commercial fishery.*

[16] *This number also includes some unincorporated business income from hunting and trapping.*

Part-time employment is becoming less prevalent in the commercial fishery



Source: Statistics Canada
Figure 15

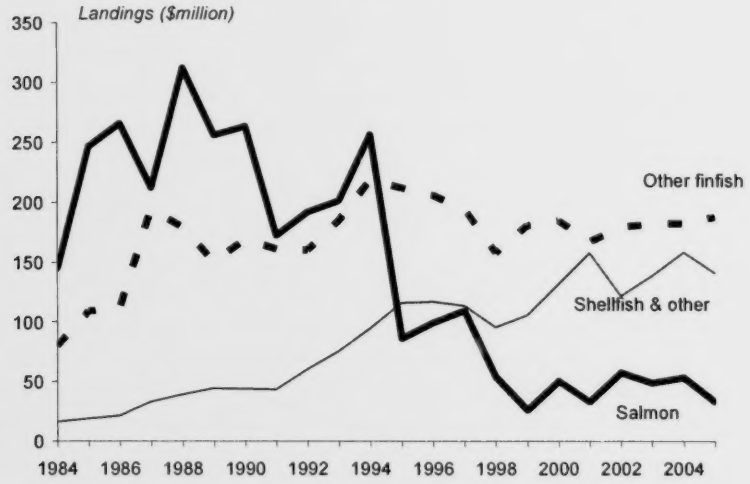
Fewer part-time workers

Historically, apart from the seasonal nature of the industry, part-time employment was quite prevalent in the commercial fishery compared to many other goods-producing industries. As many as a third of people who were counted as employed in this industry were considered to be part-time employees (spending fewer than 30 hours a week on the job), a number that is more in line with figures typically seen in the service sector. Since 2002, the number of people employed on a part-time basis in the commercial fishery has fallen to less than 10%.

Revenue fell 8% in 2005, dropping to $362 million

Revenue in the commercial fishery (as measured by landed value) was $362 million in 2005, down 8% from the previous year. The landed value of salmon fell 38% to just shy of $33 million, only slightly more than the historic low of $26 million recorded in 1999. The landed value of herring (-9%) also declined in 2005. However, the landed values of halibut (+1%), and groundfish (+8%) increased. The value of geoducks and clams (-3%) and other shellfish (-6%) harvested in the province declined in 2005.

Shellfish and finfish other than salmon account for a growing share of total revenue in the commercial fishing industry



Source: Fisheries & Oceans Canada
Figure 16

Measuring employment in the commercial fishery: conflicting estimates?

According to the DFO, which requires all participants in the commercial fishery to hold a valid a Fishers' Registration Card (FRC), there were 8,500 people in British Columbia eligible to fish commercially in 2004, the latest year for which this information is available, nearly three times the number (2,800[17]) reported in Statistics Canada's Labour Force Survey. This difference between the number of people holding FRCs and the number of people counted in the Labour Force Survey has persisted throughout the study period. Although the discrepancy has been shrinking over time, it remains significant.

[17] *This figure includes hunters and trappers as well as those employed in the fishery.*

Since 1984, the number of eligible fishers in the province has been significantly higher than the Labour Force Survey figures

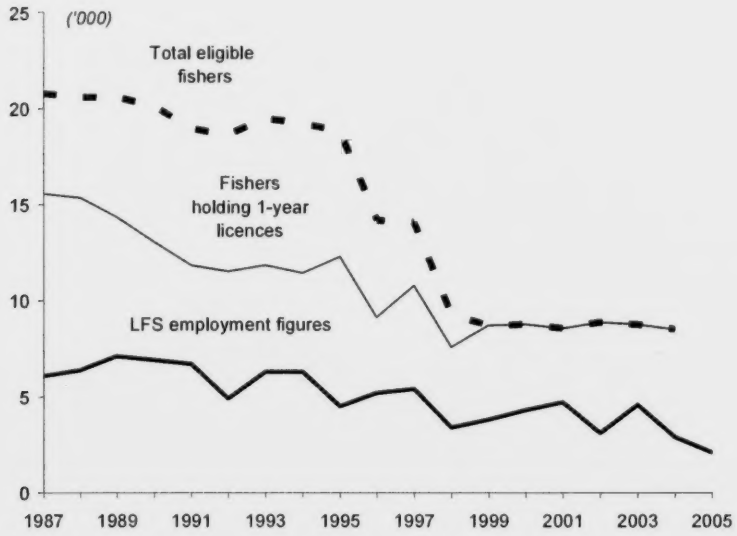


Figure 17

Source: Statistics Canada and Fisheries & Oceans Canada

There are a number of reasons why the annual Labour Force Survey estimates are so much lower than the number of eligible fishers.

An individual could hold a valid FRC even if he or she is no longer working in the fishery

The number of people who hold a valid FRC is a measure of *potential* rather than *actual* employment in the fishery. Until the early 1990s, it was possible to purchase a 5-year commercial fishing licence. These licences began to be phased out in the early 1990s, and there were no longer any in effect by 1999. Prior to that, a person could, in theory, hold a valid licence for up to five years after he or she had stopped working in the industry. With annual licencing requirements, it is less likely (but not impossible) that individuals with valid FRCs have left the industry. The decline in the size of the gap between the number of eligible fishers and the LFS employment data since the mid 1990s may be partly due to this change in licencing practices.

A fisher must hold a valid FRC even if he/she only participates in the fishery for a few days of the year

Because the period during which it is possible to commercially harvest the stock of seafood is limited by the availability of the stock, and by fishery regulations surrounding openings and closures of the season, some of the people who work in the fishery are not able to earn a living at this activity year-round. Some fisheries are open for only a few days, while others have a

longer harvesting period. Individuals are obliged to obtain an FRC regardless of how much time they spend working in the commercial fishery. Some individuals who hold valid FRCs may fish only for a very short period, in only one fishery or only at certain times of the year.

People who hold more than one job are considered to be employed in the industry in which they spend most of their time working

The Labour Force Survey is a monthly survey of households. Respondents are asked to identify which industry they either worked or were looking for work in during the reference week. If they hold more than one job during the reference period, they are considered to be working in the industry in which they spend most of their time on the job. This means that multiple jobholders who spend less time fishing than working in other industries are not included in the employment statistics for the commercial fishery.

Employment in the fishery is highly seasonal. Annual employment figures are calculated as averages of the monthly data

Monthly employment figures from the Labour Force Survey are a count of the number of people who were working in a particular industry during the reference week. Annual employment figures are calculated as averages of the monthly data.

The number of people working in the fishery varies from month to month

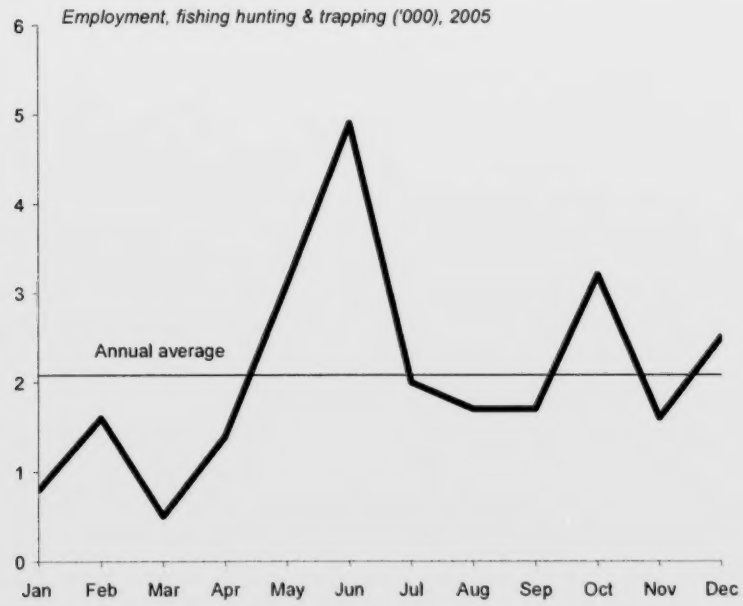


Figure 18

Source: Statistics Canada, Labour Force Survey

In 2005 employment in the commercial fishery peaked at just under 5,000 people in June, but dropped to well below 1,000 earlier in the year. The annual average employment level was 2,100 people.

The amplitude of the monthly fluctuations in employment levels during 2005 is not uncommon, as figure 19 illustrates. In any given year, the maximum number of people working in the fishery during a single month can be more than double the annual average for that year. Similarly, the minimum employment level during the year can be as little as 24% of the annual average.

Big seasonal variations in employment are common throughout the period

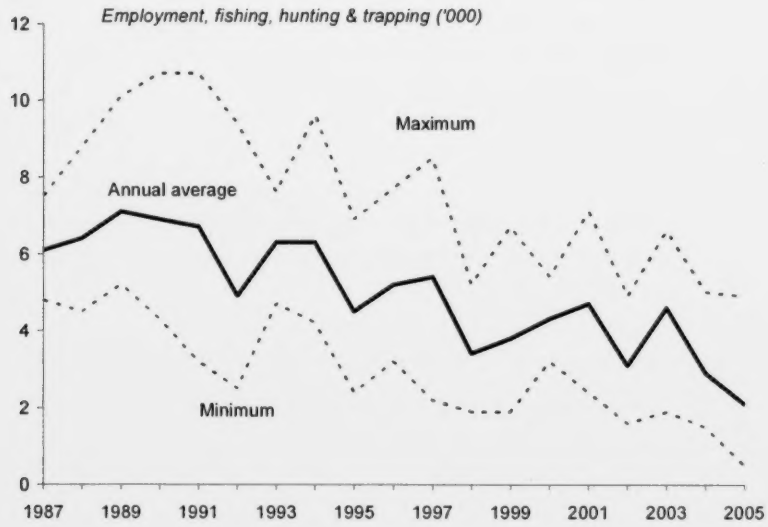


Figure 19

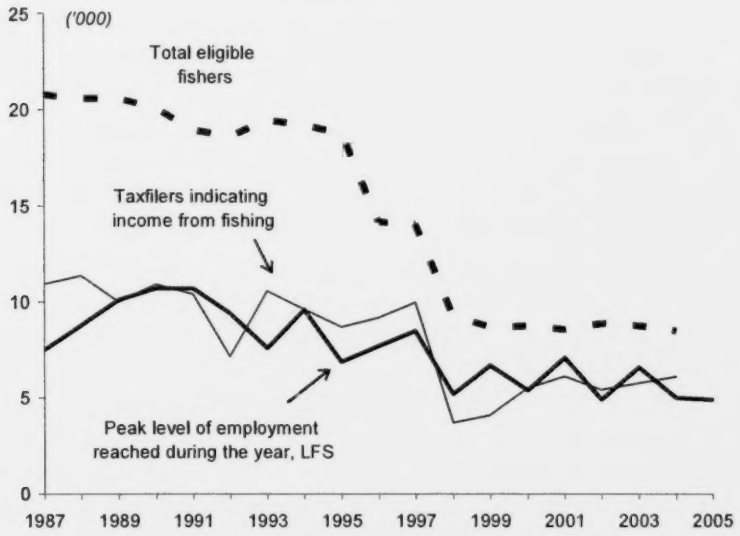
Source: Statistics Canada, Labour Force Survey

In the Labour Force Survey, an individual who works in the education industry for ten months of the year and in the fishery for two months during the summer would only be counted as an employee in the commercial fishery for those two months of the year–and would count as one-sixth of an employee in the annual average employment data for the fishery.

This treatment properly reflects actual employment by industry during the month in question, but means that in an industry such as fishing, which is highly seasonal, there can be big variations between the number of people working in a given month, and the annual average value.

Many industries, including agriculture, forestry, retailing, education and others, also show marked seasonal fluctuations in employment. People may work for short periods in these industries even if their main job is in another sector of the economy.

Taxfiler data suggest that Labour Force Survey data are generally in the right ballpark for the commercial fishery



Source: Statistics Canada, Fisheries & Oceans Canada and Canada Revenue Agency
Figure 20

Peak employment levels are closer to the FRC counts...

Since there is such a marked seasonality in the data, and since the number of FRCs indicates the maximum number of people potentially working in the commercial fishery during the year, a more valid benchmark for comparison with the FRC numbers would be the yearly maximum from the Labour Force Survey data. Using this as a basis for comparison, it can be seen that the discrepancy between the two data sets is much smaller than it seems to be at first glance. However, the numbers are still quite different.

...and taxfiler data are in line with peak employment levels from the Labour Force Survey

One other source of information, which is a more direct measure of employment than the FRC figures, comes from tax data. The Canada Revenue Agency reports on the number of people who indicate that they received some of their income from fishing on their annual tax returns.

When the number of taxfilers reporting fishing income is compared to the annual maximum for the commercial fishery, it can be seen that in most years, the numbers are of the same general magnitude. This confirms that the employment data published by Statistics Canada is generally consistent with information obtained from tax records.

What is the best measure of employment in the commercial fishery?

The number of Fishers' Registration Cards indicates how many people could potentially be working in the commercial fishery at some point during the year. It does not distinguish between people who spend only a few days working in the fishery and those for whom fishing is a full-time, year-round occupation.

Similarly, data on the number of taxfilers who indicate that they have received some income from fishing is not necessarily a good measure of employment in the industry, since the income could be derived from only one day or from 365 days of fishing effort during the year.

Employment figures are not meant to be counts of every person who spends some time working in an industry during a given period. Instead, employment measures the amount of labour used by a given industry in order to produce its output.

Annual averages give the best indication of the amount of labour used by each industry. For example, if one industry employs 12,000 people full-time for one month of the year, and another industry employs 1,000 full-time workers each month, the total amount of labour used by both industries is the same. The first industry has simply concentrated its efforts into one month of the year rather than spreading them over all twelve.

The use of annual averages thus ensures that employment comparisons among industries are consistent, in that seasonal fluctuations in the data are averaged out. However, it should be noted that the use of annual averages does not take into account variations in the actual number of hours worked. It only smoothes out the seasonal fluctuations in different industries so that the yardstick used to measure employment is the equivalent of a year-round job. This is another reason why the employment figures for the commercial fishery are lower than may have been reported elsewhere.

Monthly data, which show variations from season to season, is better able to illustrate the movement of people into and out of employment in an industry such as the commercial fishery than are annual figures.

The Labour Force Survey

Much of the discrepancy between the Labour Force Survey (LFS) data and other measures of the number of people who spend some time working in the commercial fishery can be explained by the definitional issues discussed above. However, it is important to note that the Labour Force Survey is a household survey. Nationally, 53,400 households, or about 107,000 people are surveyed each month. In BC, the sample size is just under 6,400. Households remain in the survey for six months, and one-sixth of the sample enters or is dropped from the survey in each month. For most industries, that sample size is adequate and the methodology ensures that the numbers are robust. However, in the case of relatively small industries such as the commercial fishery, the size of the sample may have a bearing on the numbers. The use of

annual averages should theoretically correct for variations in the sample from month to month, but data for every small industry should be viewed as an approximate figure rather than an exact number.

Other Measures of Employment

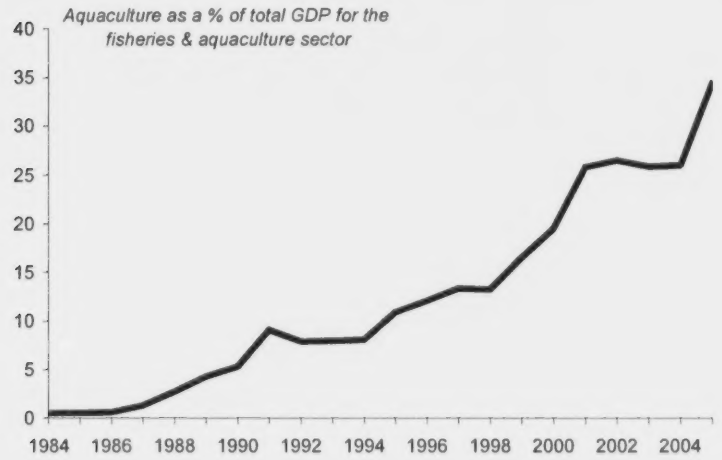
Employment estimates presented in other studies of the commercial fishery and fish processing industries may differ from the numbers in this report because they use different data sources. In addition, they often measure full-time equivalents rather than simply counting the average number of employees in a given year.

Full-time equivalents (FTEs) are better measures of the amount of effort expended in the industry, since they differentiate between part-time jobs and full-time employment. However, FTE measures are not available for all industries. In this study, a simple count of the average annual number of jobs has been used, making it possible to compare employment in the sector with the number of jobs in other industries.

5. Aquaculture

The province's aquaculture industry, once a small, relatively insignificant player in the fisheries and aquaculture sector, is also the one that has continuously shown the most rapid growth during the past two decades, and has now overtaken all other industries in the sector as the leading contributor to GDP. In 1984, the industry's GDP was estimated at $2.3 million–less than one percent the size of the commercial fishery. By 2005, finfish and shellfish farming activities in the province were contributing $274 million to the province's total GDP. The industry now accounts for a third of the total GDP originating in the fisheries and aquaculture sector, and is the largest industry in the sector.

BC's aquaculture industry has developed into a significant player in the fisheries and aquaculture sector



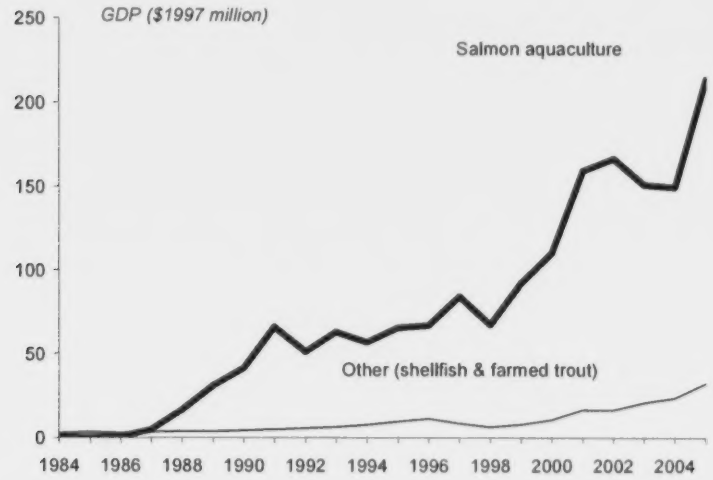
Source: BC Stats
Figure 21

Aquaculture has out-performed virtually every other industry in the BC economy during the period since 1984. Of all the industries for which GDP estimates are produced only a handful have seen similarly strong growth during this period, and very few could boast overall growth of more than 8,000% since 1984 as the aquaculture industry has.

The expansion of the aquaculture industry is largely due to the fact that the salmon farming industry has developed from infancy to maturity during the last twenty years. Shellfish farming in the province has also made big gains, but is no longer the dominant force in this industry. Between 1984 and 2005, GDP in the salmon farming industry rose from $0.3 million to $214 million. It now accounts for the lion's share of the industry's output. Over the same

period, the shellfish farming industry's contribution to GDP also increased substantially, growing from $3 million to $31 million over the same period.

The rapid expansion in aquaculture is largely due to the growth of salmon farming, which now dominates the industry



Source: BC Stats
Figure 22

Unlike the commercial fishery, where the main costs borne by producers are those directly related to harvesting, aquaculture operators purchase their stock and nurture it until it is ready to be harvested. Capital investment within the aquaculture industry is tied up in pens, nets and other gear rather than in boats. Although aquaculture production is more labour-intensive than commercial fishing, returns to labour and capital in this industry represent a smaller share of the total cost of production, because fish farmers also incur other costs for feed, stock and so on. These represent a significant share of total spending.

2,100 British Columbians were employed in aquaculture in 2005

Employment in the aquaculture industry was estimated at 2,100 in 2005, up significantly from 1,600 in the previous year. It is important to note that these data, derived from the Labour Force Survey, are based on a fairly small sample of the population. Annual fluctuations in the data may indicate changes in the composition of the sample rather than a true increase or decrease in the number of people employed. This is especially true for an industry such as aquaculture, which employs relatively few workers. It should also be noted that employment in the aquaculture sector is generally year-round with lower seasonal variability than in the other sectors. Probably the strongest conclusion one should draw from these numbers is that just over

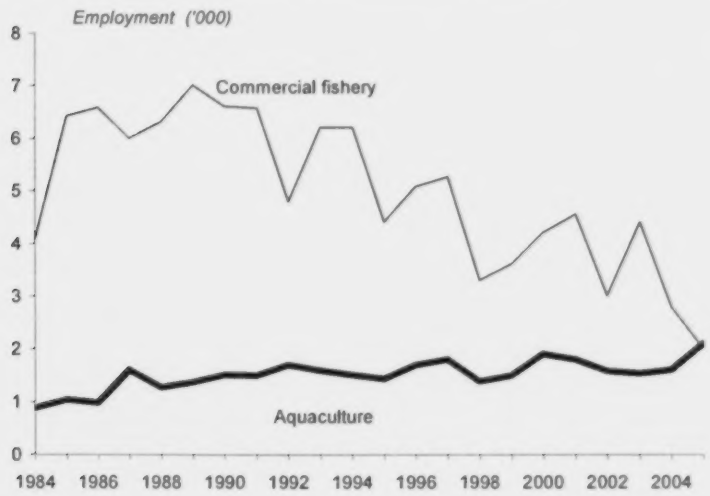
2,000 people work in aquaculture, about the same number as in the commercial fishery.

Measuring Employment in Aquaculture

The measurement of employment in small industries, especially those undergoing rapid change, such as aquaculture, is always a challenging exercise.

Statistics Canada has prepared estimates of employment in the aquaculture industry for the period from 1987 on, but has only released its estimates for selected years. BC Stats' aquaculture estimates for the intervening years were derived by linearly interpolating the published data. These employment estimates are higher than the figures implicit in the Statistics Canada totals. However, when aquaculture employment was calculated residually for the missing years, the implicit estimates displayed far too much variability to be consistent with what has been happening in this industry. Therefore, BC Stats' estimates mark a departure from the Statistics Canada data to a certain degree, but are probably more representative of what is happening in the industry. Nevertheless, users should treat the employment figures as fairly rough estimates

About 2,100 people work in BC's aquaculture industry



Source: Statistics Canada and BC Stats
Figure 23

The landed value of farmed fish and shellfish produced in BC was $338 million in 2005, up 40% from the previous year. Of this total, $319 million came from sales of farmed salmon, while the remaining $19 million in revenues were generated by farmed shellfish and other aquaculture production. By comparison, total aquaculture revenues in 1984 were only slightly above $3 million with most ($2.5 million) of that coming from the shellfish farming industry.

Workers in the province's aquaculture industry earned an estimated $41 million in 2005.

6. Fish processing

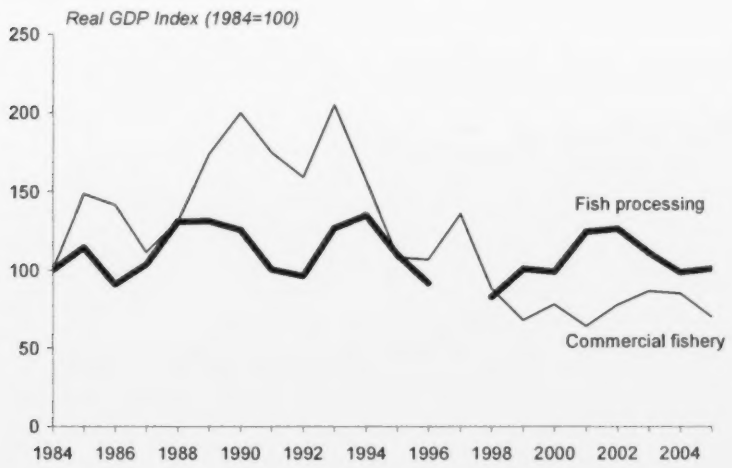
Fish processing activities in the province contributed $173 million to the province's GDP in 2005.

The fish processing industry relies on the commercial fishery as the source of raw materials used in production. To a lesser extent, aquaculture operations also provide fish and other seafood for processing, although some establishments do this work in-house. The expansion of the province's aquaculture industry, especially the salmon farming component, has probably helped offset the effect of the downturn in the commercial fishery on the fish processing industry during the last 20 years.

Fish processing facilities are not entirely dependent on the BC catch. Significant quantities of imported seafood products (caught by US or other foreign fishers) are delivered to on-shore facilities in the province.

In 2005, 70% of BC's fish plant processed fish and shellfish exclusively from the commercial fisheries, while 24% processed both wild and farmed products and 7% handled aquaculture-sourced products only.

Despite some volatility, the fish processing industry's GDP has changed little since 1984.[18]

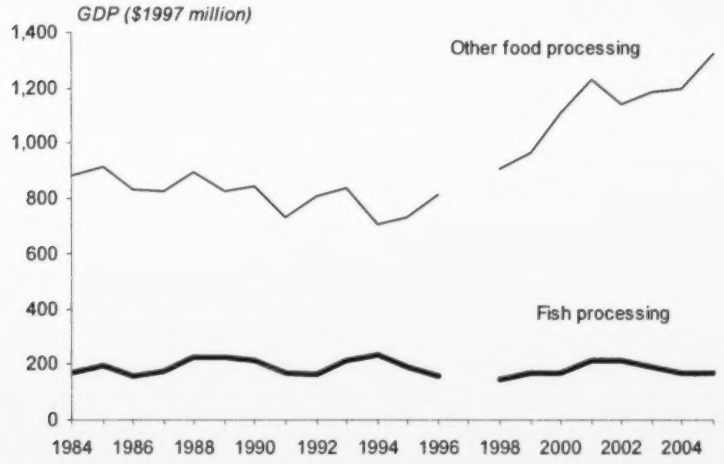


Source: Statistics Canada and BC Stats
Figure 24

[18] *Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement..*

In 2005, fish processing activities generated $173 million of the province's overall GDP, 3% more than in the previous year. Historically, fish processing activities have accounted for about a quarter of the GDP produced by the food products industry. In recent years the share has been slipping, falling to 22% in 2005. Despite this, it remains one of the most important players in BC's food products industry.

Fish processing accounts for a sizeable percentage of total GDP in the food manufacturing industry

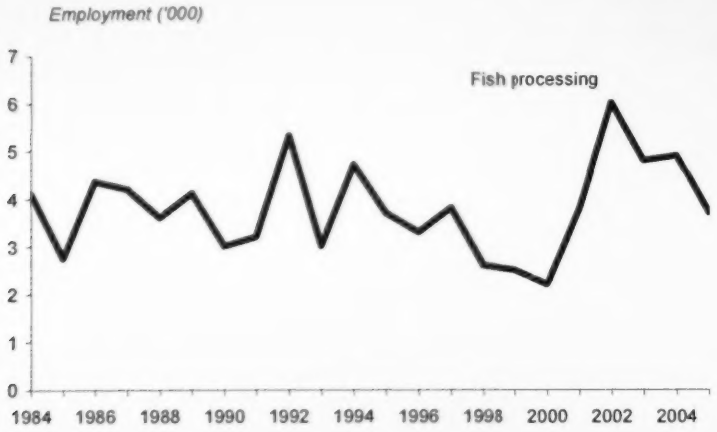


Source: Statistics Canada
Figure 25

3,700 British Columbians work in the fish processing industry

The number of people employed in the fish processing industry has fluctuated a great deal during the last two decades, peaking at 6,000 in 2002. There were 3,700 people employed in the fish processing industry in 2005, and workers earned an estimated $124 million in wages and salaries.

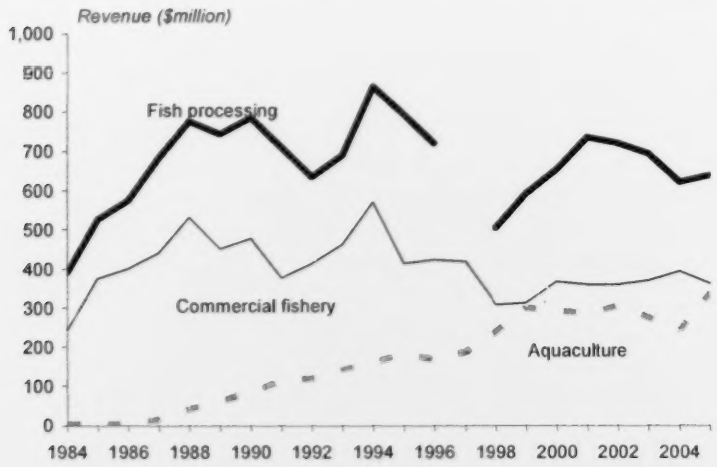
Employment in fish processing has been declining in recent years



Source: Statistics Canada
Figure 26

Revenues of fish processing establishments in the province rose $638 million in 2005.

Revenues in the fish processing and commercial fishing industries are closely linked



Source: Statistics Canada and Fisheries & Oceans Canada
Figure 27

7. Sport fishing

One of the main goals of this project was to derive estimates of GDP and employment for the sport fishing industry that would be comparable with those for other industries within the sector, as well as other industries in the economy. The GDP, employment, income and revenue data presented in this section have been developed using methods similar to those used to measure the size of other sectors such as tourism and high technology.

Deriving sport fishing estimates

Sport fishing is not an industry for which economic measures are readily available as they are for the commercial fishery or fish processing industries. In this way, sport fishing is similar to the tourism and high technology sectors.

Industries such as accommodation, food and beverage services, retailing and so on have a sport fishing component. However, the sport fishing component is not identified separately from other activities of the industry.

Finding a suitable definition of the sport fishing industry was the first step in developing a methodology for measuring the size of the industry. The definition, which was developed in consultation with the then Ministry of Environment, specified that the industry should include the sport fishing related activities of all industries that sell directly to anglers. This definition is very similar to the one used to define the tourism sector, which includes a portion of the activities of all industries that sell directly to tourists.

The methodology for deriving estimates of GDP, revenue and employment in the sport fishing industry draws on work previously done by BC Stats for the tourism and high technology sectors.

It was necessary to include the activities of both tourist and the non-tourist anglers, so industries providing services directly to anglers and other tourists were first sorted into three groups.

Tourists versus resident (non-tourist) anglers

- The first group included industries providing goods and services that would be used by both tourist and local anglers. This would include the services of marinas as well as the sport fishing related activities of sporting goods, boat and fuel retailers. The sport fishing allocator for these industries was determined by comparing expenditure data from surveys of recreational anglers to total spending on the same types of goods and services by all consumers in the province. For example, the percentage of fuel expenditures that was made by anglers was used to determine the sport fishing component of GDP, revenues and employment in the gasoline retailing industry.

The relationship between tourism and sport fishing

Some, but not all, of the GDP, employment and revenue in the sport fishing industry is also part of the province's tourism sector.

Many recreational anglers are also tourists–people who travel a distance of 80 kilometers or more from their usual place of residence in order to participate in this activity.

At the same time, many anglers who live on the coast of BC or near inland waters would not be considered tourists because they can participate in this activity without traveling far from home.

For this reason, a significant percentage of the GDP, employment and revenue data reported for the sport fishing sector is also included in the tourism sector. Users of tourism and sport fishing estimates should be aware of this overlap.

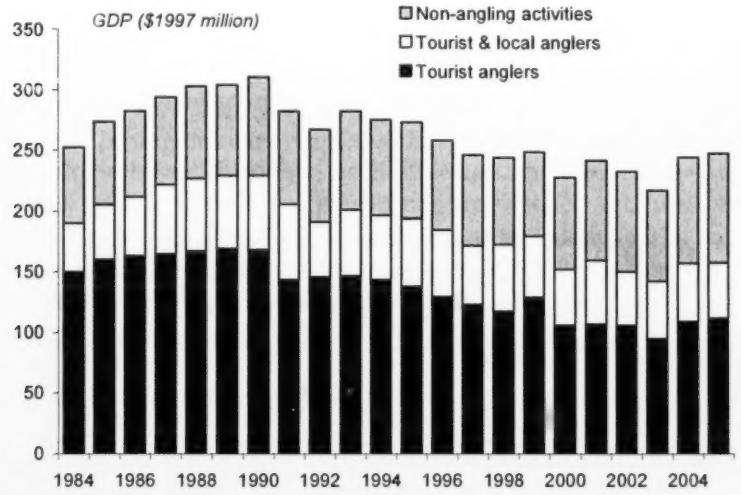
- The second group included industries providing air and water transportation, accommodation, food and beverage services and services such as guiding to tourist anglers. It was assumed that non-tourist anglers would not purchase these services. For these industries, an angler proportion was again calculated by comparing data from the angler surveys with total consumer spending on these services. That ratio was then applied to the tourism component of the applicable industry's GDP, revenue, and employment.
- The third group included industries providing other services that have a tourism component. This includes transportation other than air or water transportation, as well as various other services purchased by tourists. It was assumed that tourist anglers would behave in the same way that other tourists do. That is, they would be as likely to purchase souvenirs, visit an attraction, or go to a museum at some point during their trip as any other tourist would. The sport fishing allocator for these industries was based on the percentage of overnight visitors to the province who are also sport-fishers, and was applied to the tourism component of these industries.

The definition adopted for this exercise specified that all industries that sell directly to anglers would be included in the sport fishing industry. The question of whether or not to include industries providing services that were

not necessarily part of the angling experience was carefully considered. However, the framework that was already in place for deriving tourism indicators suggested that these types of incidental activities engaged in by tourists ought to be included in an estimate of the size of the tourism sector. There are strong links between tourism and sport fishing activities, and in order to maintain consistency with the tourism-sector methodology, the same approach was adopted in this study.

As illustrated in the figure below, angling-related activities of resident and tourist anglers account for most of the industry's GDP, as would be expected. However, in 2005, anglers who came to BC or travelled within the province to fish, also generated about $46 million in GDP arising from other activities such as shopping or visits to attractions. About a fifth of total GDP in this industry is attributable to these peripheral activities.

Tourist-related activities generated $46 million of the industry's total value added in 2005, but most of the industry's GDP is attributable to angling



Source: BC Stats
Figure 28

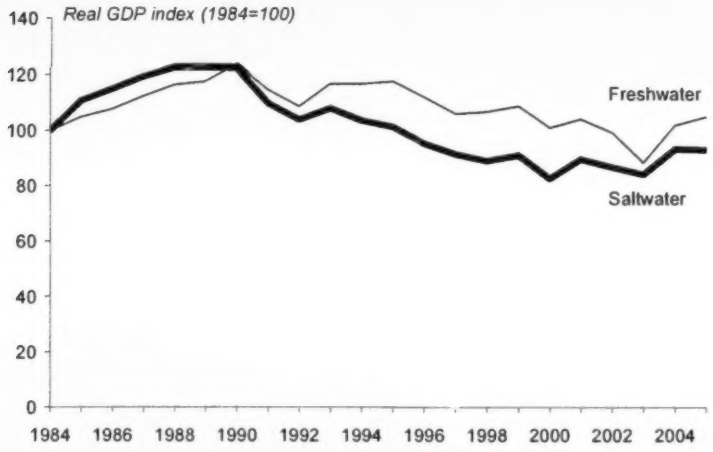
Sport fishing contributed $248 million to BC's total GDP in 2005

Despite modest improvements in specific years, real GDP in the province's sport fishing industry has been trending down since its peak in 1990. This is partly due to an ongoing downturn in the saltwater component of the industry, but also reflects a steady, albeit slower, decline in freshwater fishing activities as well.

Overall growth in the industry's GDP during 2005 was relatively weak, at just 1%. A marginal drop in the value of the saltwater component of the industry was offset by an increase (+3%) in the freshwater sport fishery.

The decline in the sport fishing industry reflects many factors. Among these is a steady decline in the numbers of both saltwater and freshwater licences sold in the province. The number of licences sold has fallen in twelve of the last fifteen years.

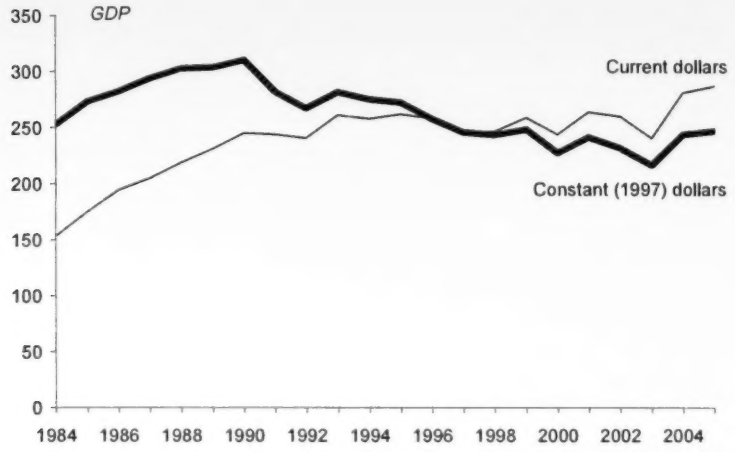
The industry suffered a setback in recent years but shows signs of recovery



Source: BC Stats
Figure 29

It is important to keep in mind that the GDP figures presented here are in constant 1997 dollars, which means that they have been restated to remove the effects of inflation. To a certain extent, price increases masked the lack of growth in the industry since 1984, as revenues continued to rise, reflecting price rather than volume effects. In current dollars, the industry's GDP has risen 88% since 1984, while the industry has contracted 2% in real terms.

Current dollar GDP has risen 88% since 1984, but real GDP has been trending down in recent years.

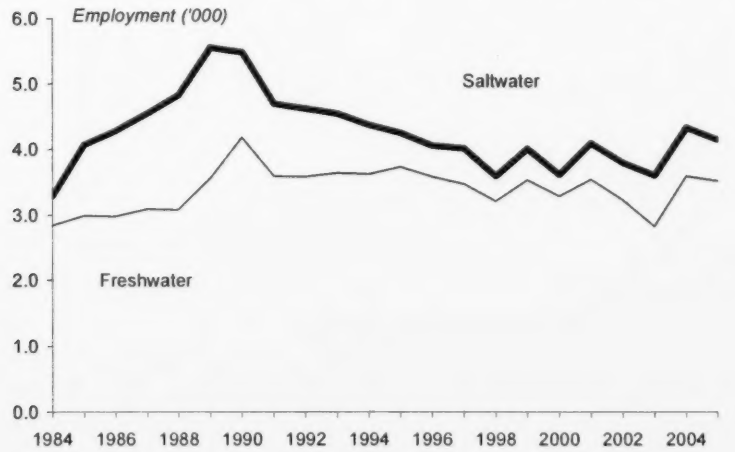


Source: BC Stats
Figure 30

Sport fishing related activities provide employment for 7,700 British Columbians

The sport fishing industry employed 7,700 British Columbians in 2005, making it the single largest employer in the fisheries and aquaculture sector. Half of the jobs in this sector were in sport fishing related activities. This includes both full-time and part-time workers. Saltwater fishing (4,200) employed more British Columbians than the freshwater fishing (3,500) industry.

Saltwater and freshwater angling have both suffered from declines since 1990



Source: BC Stats
Figure 31

Freshwater and saltwater angling activities put about $162 million (before taxes) into the pockets of BC workers in 2005, including $89 million for those employed in the saltwater industry and $73 million for workers in the freshwater industry.

Nearly four out of every ten dollars earned in the fishing and aquaculture sector come from sport fishing activities

Revenue arising from angling activities in the province was estimated at $865 million in 2005, making up 39% of the $2.2 billion in total earnings of the fisheries and aquaculture sector. Of this total, an estimated $467 million was generated by saltwater angling, while $398 million came from the activities of freshwater anglers.

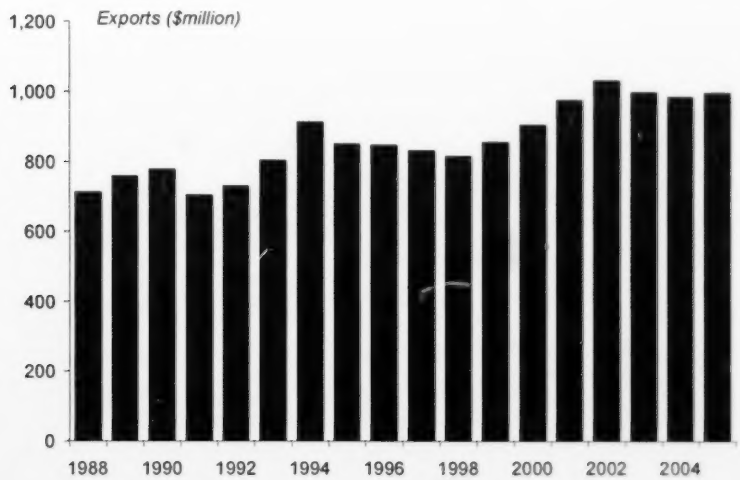
8. International Trade in Fish and Seafood Products

Export and Import Data

The figures presented in this section only include exports of goods produced by the commercial fishery, aquaculture and fish processing industry. The data are based on administrative information obtained from Canadian and US customs documents.

The estimates do not measure the value of sport fishing exports or imports (i.e., revenues generated by non-resident anglers in BC in the case of exports, and BC anglers who fish outside the province in the case of imports).

Value of fish and seafood product exports reached $996 million in 2005



Source: BC Stats
Figure 32

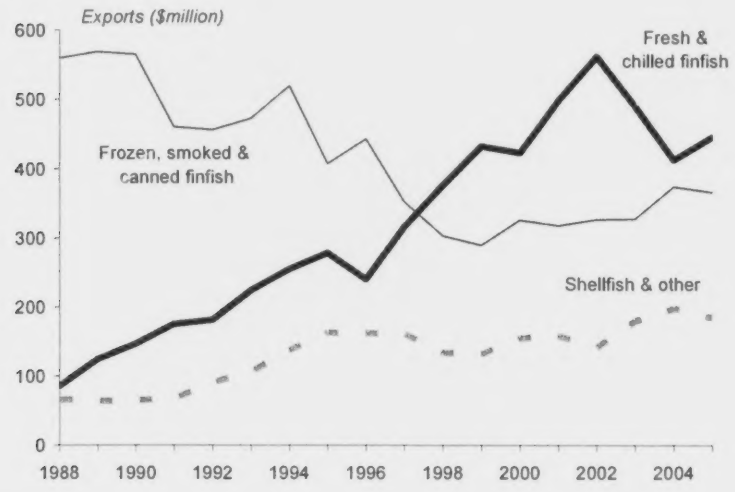
Fish and seafood product exports

BC's exports of fish and seafood products–live fish, fresh/chilled fish and frozen or processed fish and seafood products–reached $996 million[19] in 2005 (+1%), a slight increase over the 2004 level. Exports of processed and frozen finfish, which historically accounted for the bulk of BC's fish exports, have been declining, and fresh and chilled finfish now make up a bigger share

[19] *All figures in this report are expressed in Canadian dollars.*

(45%) of total exports than frozen, smoked and canned finfish products (37%). Shellfish and other seafood products made up 19% of the total value of BC's fish and seafood exports in 2005.

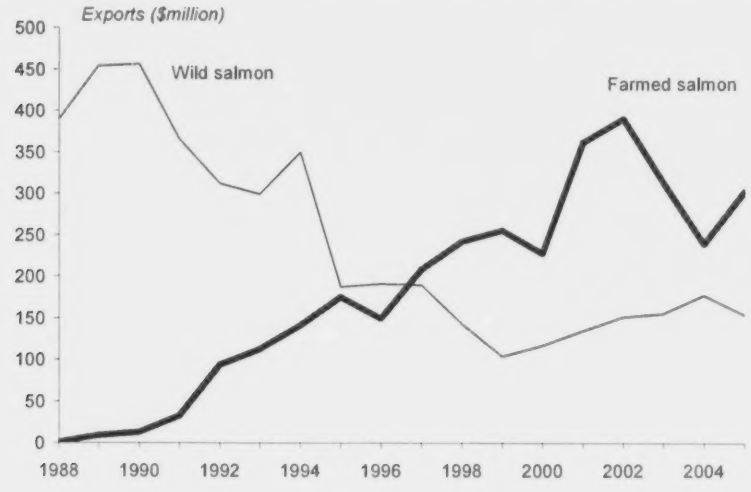
Fresh and chilled finfish are becoming an increasingly important source of export dollars



Source: BC Stats
Figure 33

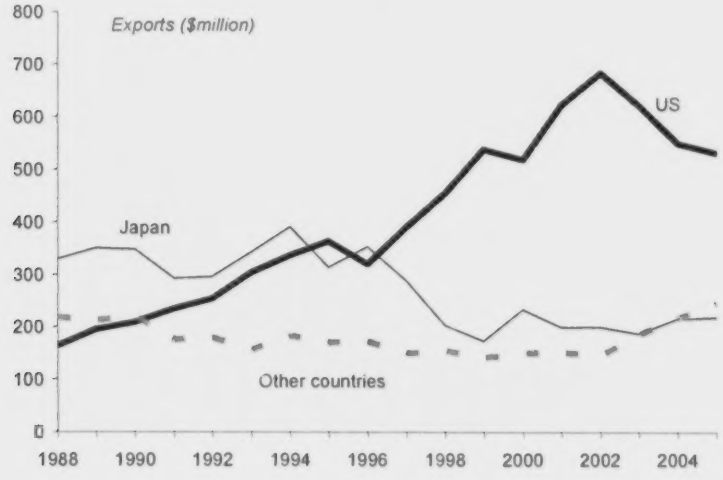
This shift reflects the growing importance of the province's aquaculture industry. Many farm-raised fish are marketed and sold fresh, dressed or filleted, rather than being canned or frozen.

Farmed salmon exports have been rising, while wild salmon exports have fallen



Source: BC Stats
Figure 34

The US is the biggest market for BC's fish and seafood exports



Source: BC Stats
Figure 35

As has been the case since the late 1990s, the United States is the largest foreign purchaser of BC fish and seafood products, with more than half (53%) of the province's international shipments of fish and seafood products destined for use in the United States in 2005. Japan (22%) was the second most important market in 2005, while the remainder of BC's fish and seafood product exports were shipped to the European Union (7%) or other (18%) destinations.

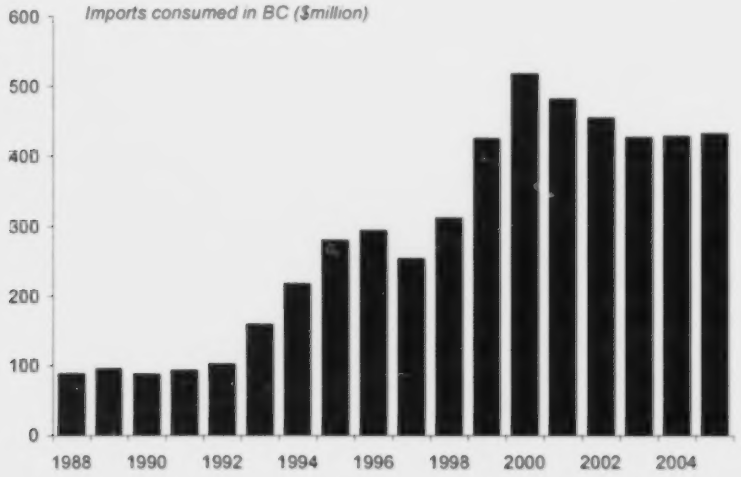
Fish and seafood product imports

International imports of fish and seafood products consumed in BC increased 1% to $432[20] million in 2005. This was nearly five times the 1988 value of $88 million. It is important to note that these figures are in Canadian dollars and include the effects of changes in the value of the Canadian dollar relative to other currencies.

The value of fish and seafood products imported from the US increased from $42 million to $174 million between 1988 and 2005. Japan ($4 million) and the European Union ($12 million) shipped comparatively little in the way of fish and seafood products to the BC in 2005, but imports from other countries were valued at $242 million.

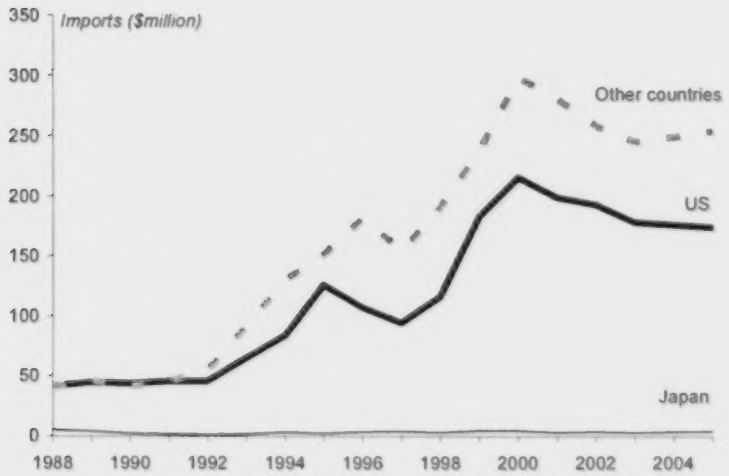
[20] *These estimates have been adjusted so that they include only those imports that are consumed in the province.*

The value of fish and seafood product imports has been declining in recent years



Source: BC Stats
Figure 36

Most of the fish and seafood products imported and consumed in BC come from countries other than the US and Japan

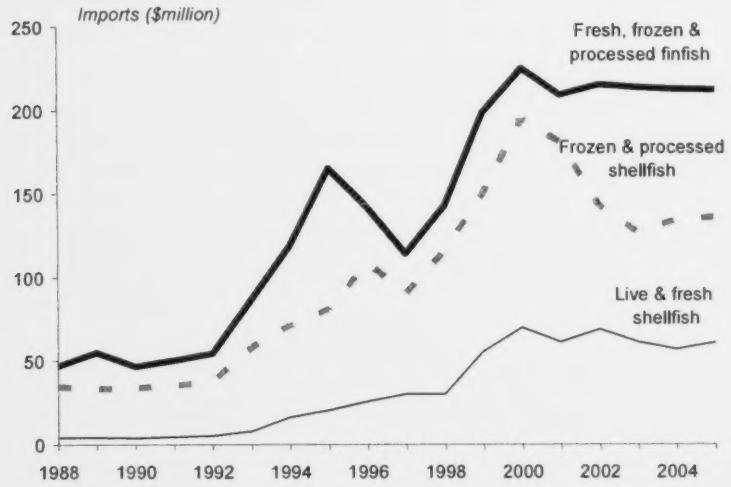


Source: BC Stats
Figure 37

Most of the fish and seafood that is imported and consumed in the province enters the country after it has been frozen or processed (canned, smoked, cooked, or otherwise preserved). Some fish and seafood products are imported for processing in BC and are subsequently re-exported. Of the $212 million of imported finfish products consumed in 2005, most was either frozen

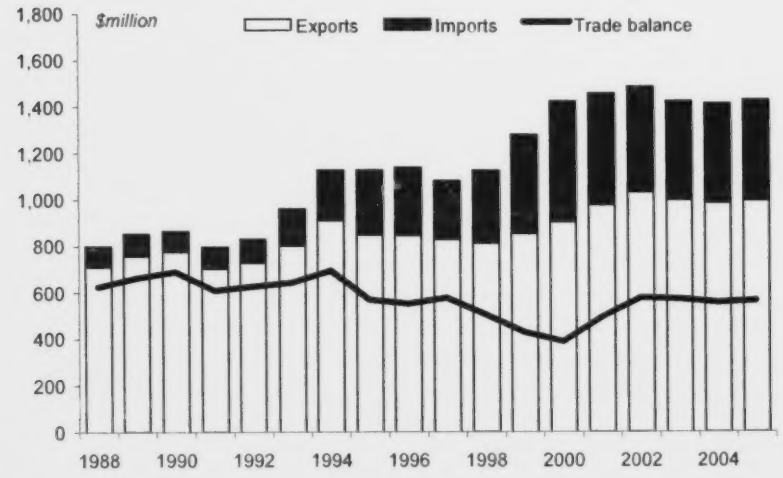
($91 million) or processed ($73 million). Fresh finfish imports were estimated at $49 million, including $21 million of fresh salmon.

Frozen, canned, smoked, or otherwise processed finfish account for the largest share of imported fish products



Source: BC Stats
Figure 38

BC's maintains a large trade surplus in fish and seafood products



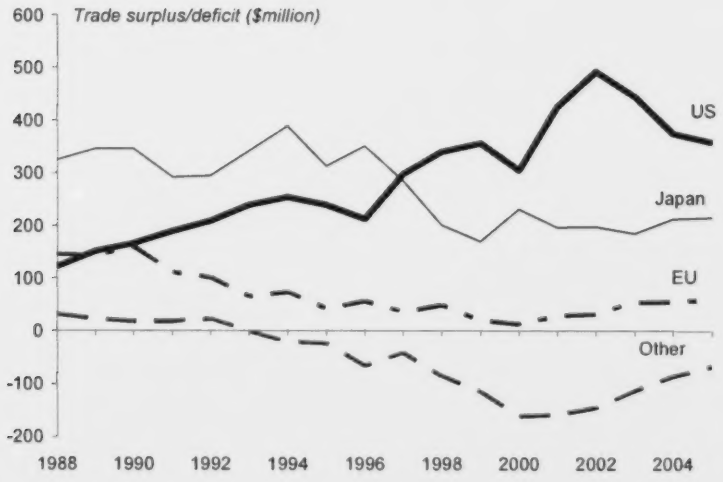
Source: BC Stats
Figure 39

BC has a large trade surplus in fish and seafood products

BC exported $564 million more fish and seafood products in 2005 than it imported from other countries. The trade surplus has improved in recent years, as the value of exports began to recover after a decline in the late 1990s, while the value of imported fish and products has been falling.

The province's trade surplus with the US was $358 million in 2005. BC also had a substantial surplus in its trade with Japan (+$214 million) and the European Union (+$59 million). However, the province continued to have a deificit in its trade in seafood products with other countries (-$67 million).

BC's trade surplus with the US has been shrinking since the beginning of the decade



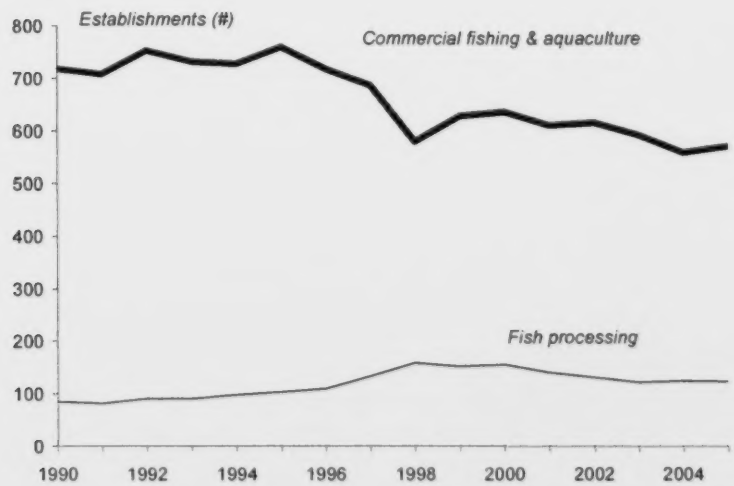
Source: BC Stats
Figure 40

9. Establishment Counts

Statistics Canada's Business Register listed 571 BC establishments actively engaged[21] in the commercial saltwater and freshwater fishery, including aquaculture, in December 2005. Of this total, 106 were primarily engaged in finfish and shellfish farming, 124 were classified as fish processing facilities and 465 were in the commercial fishery.

Establishments are classified to an industry based on the activity from which they generate the largest portion of their revenues. For example, an establishment that is mainly engaged in farming salmon, but which also processes the harvested fish would be included in aquaculture (the main source of its revenue) rather than in fish processing.

The number of establishments in commercial fishing and aquaculture has been steadily decreasing



Source: Statistics Canada, Business Register
Figure 41

Vertical integration of fish farming and processing activities may be partly responsible for differences between the Business Register data and information on the number of companies licensed to engage in fish farming and fish processing activities. For example, vertical integration has occurred when two establishments that were formerly classified separately to fish processing and aquaculture merge and begin operating from a single location. This establishment would be counted only once as a part of the industry which corresponds to the activity from which most of their revenues are earned.

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[21] *These figures exclude establishments that are listed in the register, but do not have an employee payroll.*

The Business Register also indicates that there were 511 boat retailers, guide outfitters and marinas operating in BC at the end of 2005. Putting these numbers into perspective, the total number of businesses in the accommodation industry was 2,027, and there were 9,603 establishments associated with the food and beverage services industry.

A total establishment count for the sport fishing industry is not available from Statistics Canada sources. Unlike the commercial fishery, aquaculture or fish processing, many establishments in the sport fishing industry provide services to anglers as well as to people who are not sport fishers.

Estimates of the economic contribution made by sport fishing were based on taking a proportion of activities in all industries providing services to sport fishers. The percentage was applied to industry totals, not to individual data for particular establishments. This means that all establishments in each industry with a sport fishing component have been included in the estimates, even if only a very small share of their total activities is deemed to be sport fishing related. As a result, a total establishment count for the sector as defined in this study would be of very limited value.

A count of establishments is not a good indicator of the economic activity generated within a particular industry or sector of the economy. For example, in some industries where there are very large capital costs associated with creating a new establishment, there may be relatively few establishments, but the revenues generated by these establishments could be substantial. For instance, in the case of accommodation services, an establishment count would not differentiate between a small bed and breakfast operation in a relatively remote location and a large 300-room hotel in the downtown core of a large city despite the fact that the economic activity generated in these two establishments is likely to be vastly different.

10. Input/Output Multipliers

The direct, indirect and induced effects arising from the economic activities of industries within the fisheries and aquaculture sector were calculated using the British Columbia Input/Output model. The model currently in use is based on information from the 2001 input/output tables for the province.

Interpreting Input/Output Results

The **direct effect** measures the actual expenditures made by establishments operating in the sector. This is the appropriate measure to use when comparing the contribution of the fisheries and aquaculture sector with that made by other industries.

Also included in the report is an estimate of government revenue generated by the industry. This revenue is based on the tax structure that has been built into the model. As the model is currently based on 2001 data, the tax structure imbedded in the model basically reflects the situation in that year. Thus, the government revenue figures should be viewed as ballpark estimates.

The **indirect effect**, which measures the economic activity of industries supplying goods and services to fisheries and aquaculture sector operators, is also identified. In order to understand what this represents, it is necessary to remember that I/O analysis assumes that the expenditure in question represents a net addition to economic output. For example, it is assumed that when a fishing lodge purchases a box of apple juice, the apple juice producer has to increase his production by one box. This means that he buys more apples, sugar, packaging, and so on, in order to produce the juice. In other words, the effect of a change in economic activity trickles down to many different industries in both the goods and service sectors. The indirect effect is simply the total (including second-round effects) of all the increased demand for goods and services used by producers supplying operators in the fishing industry. ***It is important to note that the indirect effect does not measure additional activity in the fisheries and aquaculture sector; rather, it is a measure of increased activity in all parts of the economy.***

The indirect effect (in terms of output, employment and government revenue) is calculated based on the output, or total revenue of the fisheries and aquaculture sector. The indirect employment and government revenue figures are not linked to employment or taxes directly generated by the industry.

The third element in the tables is the ***induced effect***, a measure of the impact on the economy of spending by workers employed as a result of the fisheries and aquaculture sector's activities. It is assumed that these workers will spend $0.80 of every dollar that they earn. Their spending has a ripple effect on the economy, as it too results in an increase in the demand for the goods and services that they buy.

The induced effect, particularly for industries such as sport fishing, which are largely supported by personal expenditures (rather than supplying goods and

services to other industries) can be difficult to interpret. The reason for this is that it is a measure of increased spending by individuals resulting from an initial increase in spending by individuals (which is what drives the sport fishing industry). In other words, there is a certain circularity inherent in the use of induced effects in this case.

Because it measures increased spending by workers employed as a result of the fisheries and aquaculture sector's activities, the size of the induced effect can vary considerably. It is lower if you assume that there is a social safety net in place so that the income of the previously unemployed workers increases only by the difference between what they are earning and the amount of employment insurance or income assistance they were receiving. The "safety net" scenario is based on this assumption

Alternatively, it can be assumed that all of the people who were hired as a result of the sector's activities in the province were previously not receiving any income at all. They were living off savings, or with friends or relatives. The size of the induced effect is much larger in this case, as the increase in income is equal to the total amount of the wages they receive. The "no safety net" scenario is based on this assumption.

The reality is probably somewhere between these two bounds. Some of the people working as a result of the sector's activities may have had no previous source of income, while others might have been receiving some government transfers. Because it is impossible to determine where the actual value lies, the induced effect is usually given as a range.

Summing up the direct, indirect and induced effects gives a measure of the total impact of the industry on the economy. This is not to be confused with the size of the industry. It is a measure of all of the economic activity generated in all industries as a result of the sector's activities in the province. Again, because the induced effect is presented as a range, the overall effect is also presented in this way.

$1 million of output is associated with a GDP of $410,000 in the sector, and an additional $170,000 in supplier industries

Multipliers for the fisheries and aquaculture sector (per $ of direct output)

	Direct	Indirect	Induced	Total
Output	*1.00*	*0.48*	*0.13*	*1.61*
GDP	*0.41*	*0.17*	*0.07*	*0.65*
Employment (jobs per $million)	*7.2*	*2.8*	*1.1*	*11.2*
Household income	*0.27*	*0.12*	*0.04*	*0.43*
Tax revenue	*0.06*	*0.03*	*0.02*	*0.11*

Based on the 2001 Input/Output results, for every $1 million of output (i.e., total revenue) in the fisheries and aquaculture sector, an additional $480,000 is generated in the province by industries supplying goods and services used by

the commercial fishing, aquaculture, fish processing and sport fishing industries.

In terms of GDP, a $1 million increase in output directly adds $410,000 to the province's GDP, with another $170,000 generated in supplier industries.

A $1 million increase in output supports 7 direct jobs, and another 3 jobs in industries supplying goods and services to the sector.

With respect to tax revenues, $60,000 in direct tax revenue is generated for every $1 million of output. Further, every $1 million spent by the sector produces another $30,000 of additional tax revenue resulting from the activity of supplier industries.

11. Topics for Further Research

Several potential areas requiring further study or work have been identified. They include:

- Further refinement of the ratios used to derive the sport fishing GDP, employment and revenue estimates using information from other sources;
- Updating the sport fishing estimates to use information from the 2005 survey of recreational anglers after the data has been published;
- Refining more of the employment data by breaking it down into part-time and full-time employment;
- Developing measures of unincorporated and incorporated business income for the commercial fishery and other components of the fisheries and aquaculture sector, where possible;
- Developing better GDP to output ratios for different types of fish and shellfish farming (this could only be done if additional information on actual costs was collected);
- Developing regional data on GDP, employment and revenue;
- Developing export estimates for the sport fishing sector;
- Expanding the export and import data to include estimates of interprovincial trade in fish and seafood products;
- Developing export and import data for other countries such as Thailand or the Philippines, which are major suppliers of fish products to BC;
- Developing estimates for some or all components of the fisheries and aquaculture sector for other provinces.

12. Revisions to the Data in this Report

Most of the changes to the estimates presented in this report arise from revisions to the underlying data used to calculate them. These include revised historical GDP estimates (for the period from 1984 to 1996) published by Statistics Canada. Revisions to the historical GDP estimates were quite substantial for some industries, including both the commercial fishery and the aquaculture sector, as well as some of the industries which have a sport fishing component.

There have also been revisions to data from the Labour Force Survey. They are the result of benchmarking to new population estimates for the province, which were re-estimated based on the latest Census data (for 2001). The effect of the re-estimation was that population data for the province were revised going back many years, and since the Labour Force Survey uses population data to benchmark its estimates, this has an effect on the employment figures.

Finally, updated trade data files were used to generate the export and import tables, and the classification system used was reviewed to ensure that it was consistent with other definitions currently in use.

Appendix I: Methodological Notes and Issues

A brief summary of various methodological issues that arose in the development of estimates for the fisheries and aquaculture sector follows. Also included is a description of the methods used to generate the estimates.

1. Separating commercial fishing and aquaculture from hunting and trapping.

Statistics Canada data was the starting point for the estimates reported in this study. However, the agency's estimates of GDP, employment and labour income do not report commercial fishing and aquaculture separately. Instead, they are lumped together in the Fishing, Hunting and Trapping Industry.

The first challenge was to determine the split between the two components of the industry, since hunting and trapping activities are not part of the fisheries and aquaculture sector.

In order to extract the hunting and trapping component of GDP from the total, an independent estimate of GDP for the hunting and trapping industry was generated using information on the value of wildlife pelts produced in BC and on the relationship between GDP and output in this industry. Initial GDP estimates for the hunting and trapping, commercial fishery and aquaculture industries were prorated to ensure that they were consistent with the published totals from Statistics Canada and a total excluding hunting and trapping was calculated.

In the case of employment, data from the census was used to split out the hunting and trapping component of total employment in this industry, as reported by Statistics Canada in the Labour Force Survey.

2. Commercial fishing

Data on the volume and value of fish landings form the basis of the estimates for this industry. Landed value was used as it conforms most closely to the concepts used by Statistics Canada to define the commercial fishing component of the fishing, hunting and trapping industry. It is the most appropriate measure because firms or establishments coded to this industry should be primarily engaged in catching fish, not turning them into processed products.

Financial returns estimates from various reports produced by ARA Consulting and GS Gislason & Associates Inc were then used to derive GDP to output ratios by species. In the case of the salmon fleet, annual estimates of financial returns (from various reports produced by GS Gislason & Associates Inc) were used to derive GDP to output ratios. These ratios were then applied to the landed value of the wild salmon catch in order to calculate GDP for the salmon fishery. There was not as much information available for other components of the commercial fishery. Financial return estimates for herring, halibut, sablefish, other groundfish, geoduck, prawn & shrimp, crab and other

shellfish were available for 1991 and 1994. GDP to output ratios for these two years were derived based on this data.

For the years prior to 1991, the 1991 ratio was used. However, for the herring and halibut fishery, a significant amount of the catch in 1991 was made by the salmon fleet; therefore, the GDP to output ratio for salmon was used for the period from 1984 to 1990. For the period between 1991 and 1994, GDP to output ratios were linearly interpolated.

For the more recent years (from 1995 on), ratios for the salmon fishery and for the other major species were adjusted to take into account changes in the cost of the inputs used in production. However, it was assumed that there was no substantial change in the technology used by the fleet–i.e., that the relationship between the volume of production and the amount of labour, fuel, and other inputs used by the fleet was stable.

The GDP to output ratio for the commercial fishery has been falling[22]

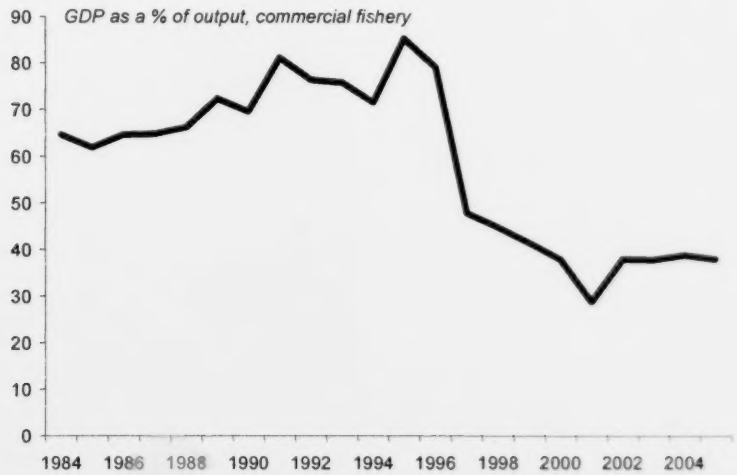


Figure 42

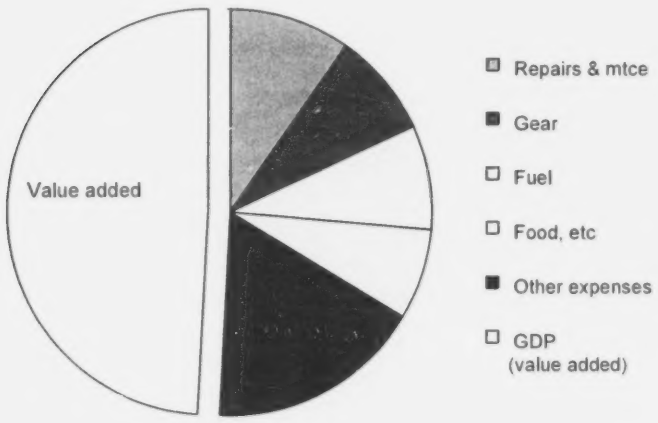
Generally speaking, the relationship between GDP and output does not change significantly from year to year. The exception to this rule of thumb would be if an industry produced many different types of products, with different associated production costs. In this case, if the product mix happened to change, or if there were advances in technology that significantly altered the way in which a product is produced, it would be incorrect to assume that the relationship between GDP and output was stable. In addition, an event such as the collapse of the salmon stock in the early 1990s (which resulted in more effort being required to catch fewer fish) can affect the GDP to output

[22] *This ratio reflects the prorating done to force the data to conform to Statistics Canada estimates, so it differs slightly from the ratios used in the initial calculation*

ratio. Given that the GDP estimates reported in this document are calculated on a species-by-species basis (where the necessary information is available), any shifts in the relative importance of the major species (such as salmon, herring, or halibut) should be correctly reflected in the estimates.

It should be noted that GDP is not equivalent to operating surplus. Some of the expenditures made by the fleet are not deducted from total revenue in the determination of GDP (e.g., wages paid to crew, the return to operators, and depreciation are all part of the value added, or GDP, of the industry rather than its output).

Data for the salmon fishery in 1995 suggested that approximately half of the value of the salmon catch is a return to labour and capital. This ratio may vary slightly from year to year.



Source: GS Gislason & Associates Inc. Salmon Fleet Returns
Figure 43

Using 1995 as an example, about half of the value of the salmon fleet's catch in that year went to pay for inputs used in production: repairs, gear, food, fuel and so on. The remainder represented the value added by the fleet–the return to the labour and capital of the skipper and crew.

It should be noted that while commercial fishers must purchase a licence to catch fish, they do not have to pay for each fish that they remove from the sea. Thus, a larger share of their revenue represents a return to their labour or capital than is the case in other industries such as aquaculture, where fish stock must be purchased and nurtured before it can be harvested. However, this is partly compensated for by the fact that the price that can be obtained for the fish usually reflects the abundance or scarcity of the fish stock, which has an effect on the amount of effort required to catch it. This is similar to the

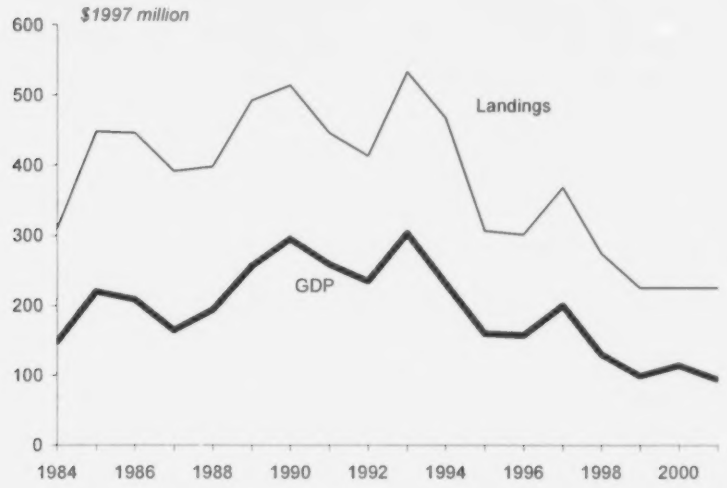
situation in many service industries, where the value of their output includes some costs for materials, supplies and energy, but largely reflects the amount of effort required to create their product, whether it is an architectural drawing, health care, accounting, or another service.

Total current dollar GDP for the commercial fishery was calculated as the sum of the GDP estimates for all species.

Constant dollar GDP estimates for each species were calculated using implicit price indices based on the value and volume of fish landings.

In the case of salmon, it was possible to use a slightly more sophisticated method (double deflation) to derive the constant dollar series. The value of fish landings was deflated using the calculated implicit price index for salmon. The cost of fuel, food, repairs, services and gear was deflated using appropriate price indices and GDP was estimated by subtracting the constant (1997) dollar value of these inputs from the value of production in 1997 dollars.

The relationship between real GDP and output in the commercial fishery has remained quite stable



Source: BC Stats
Figure 44

Revenue for the commercial fishery is equal to the landed value of fish caught in BC.

Information from the 1981, 1986, 1991, 1996 and 2001 Censuses of Canada was used to determine the percentage of total **employment** in fishing and trapping that was attributable to fishing activities. This total was further broken down into its component parts (aquaculture and commercial fishing) using unpublished data on employment in aquaculture obtained from Statistics Canada. The commercial fishing component was calculated residually.

Labour income for the commercial fishery, including aquaculture, is based on information from T4 data and the income and expenditure accounts.

3. *Aquaculture*

There was not as much information available to estimate GDP in the aquaculture industry as in the commercial fishing industry. Various costs and returns studies (dated between 1989 and 1996), combined with Statistics Canada value added estimates for the period from 1997 to 2005, formed the basis of the GDP estimates for this industry.

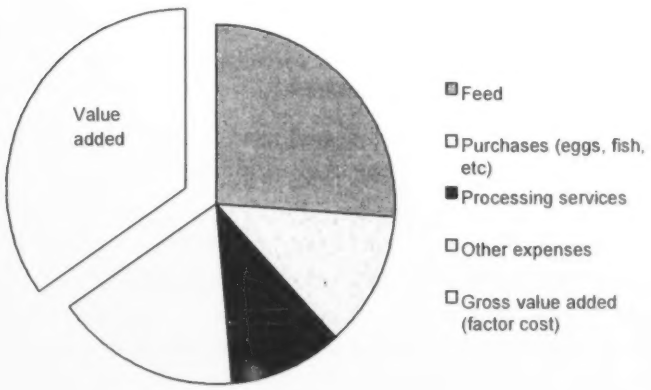
Statistics Canada's 1997-2005 financial data for the aquaculture industry was used as a benchmark for GDP estimates in this industry. However, because there has been considerable change in the nature of BC's fish farming industry since the early 1980s, it did not seem appropriate to use the 1997 GDP to output ratio for the entire period. This became obvious when GDP to output ratios were calculated for the various types of fish and shellfish farms for which cost and returns data were available. These ratios ranged from a low of about 14% for chinook salmon (based on a 1989 study) to a high of about 81% for clams. Therefore, it was necessary to devise a method of estimating GDP that would at least take into account the shift in the product mix of the industry. In 1984, BC's aquaculture industry focussed almost exclusively on the production of shellfish, but salmon farming is now the dominant activity.

The GDP to output ratios for salmon farming were both outdated and inconsistent with other sources of information. Data from the 1997 Statistics Canada survey and other work (e.g., the ARA study of the shellfish farming industry) suggested that the overall ratio for the shellfish portion of the industry should be in the range of 35-40%. Using the GDP to output ratios for salmon farming implicit in the cost and returns data, it would not have been possible to derive a GDP estimate for aquaculture that would have been within a comfortable range of the Statistics Canada figure. Therefore, it was decided to use the ratios from the studies for the shellfish estimates, and modify the salmon farming GDP to output ratio to bring it more in line with information from other sources.

The value of aquaculture production, by species, was obtained from the BC Ministry of Environment. GDP to output ratios were calculated for the following species: salmon, rainbow trout, clams, scallops and oysters. In the absence of better information, the ratio for oysters was based on PEI data for the years from 1997 on. Production data for clams, oysters and scallops were adjusted using the appropriate GDP to output ratios. For the remainder of farmed shellfish production, a current-weighted average of the three ratios was used to estimate GDP. The GDP to output ratio for salmon and trout was bumped up from 27% to 33%, bringing it more in line with the 1997 GDP to output ratio in New Brunswick's aquaculture industry, where almost all of the farmed fish is salmon. Moreover, the overall GDP estimate for the aquaculture industry derived in this way was extremely close to the Statistics Canada number for 1997.

Revised estimates for 1997, as well as preliminary data for 1998 and 1999, were released by Statistics Canada after the publication of the first edition of this report. In the 2002 edition, the revised GDP to output ratios were used for the period from 1997 to 2002, but the historical data, which had used information from the previous year's release to generate the estimates from 1984 to 1996, were not revised.

GDP and inputs in the aquaculture industry



Source: Statistics Canada
Figure 45

Constant dollar GDP estimates for the aquaculture industry were calculated using implicit price indices based on production data (the value and volume of aquaculture production), by species.

Revenue for the aquaculture industry is equal to the value of production.

Employment in this industry was estimated using unpublished data provided to BC Stats by Statistics Canada

Labour income estimates for the aquaculture sector are based on information from T4 data.

4. Hunting and trapping

Data on the quantity and value of wild pelts produced in BC was obtained from Statistics Canada. The data, which is reported for the period from July 1 to June 30, was converted to a calendar year basis using information on the timing of fur sales supplied by Statistics Canada.

In the absence of more detailed information (the trapping industry is a small one and there is not a lot of data available), it was estimated that about 30% of

the value of fur sales represents costs incurred by trappers. The remaining 70% was assumed to reflect the value added (labour and the return to capital) by the activity. This GDP to output ratio, which was based on information provided to BC Stats by Statistics Canada, was applied to the value of trapping products produced in BC.

Constant dollar GDP estimates for the hunting and trapping industry were derived using implicit prices (based on the value of fur production divided by the number of pelts) to deflate the current dollar figure.

Revenue related to hunting and trapping activities is equal to the value of fur production in each year.

Employment estimates for hunting and trapping were derived from census data on the experienced labour force by occupation. Estimates for inter-censal years were linearly interpolated.

T4-based labour income data was used to determine the hunting and trapping share of total labour income in SIC industry 03.

5. BC Stats estimates versus the Statistics Canada data

The independently derived GDP estimates for commercial fishing, aquaculture, and hunting and trapping were summed together, and then compared to the official GDP estimate published by Statistics Canada. The BC Stats figures track the published totals quite closely in terms of trends, but there is a persistent gap between the two data sets. The reasons for this gap are not clear. BC Stats' figures have been benchmarked to conform to the Statistics Canada data.

6. Fish Processing

Because the fish processing industry is a standard industry within the Statistics Canada framework, this industry presented less of a problem than the other components of the province's fisheries and aquaculture sector.

Statistics Canada publishes GDP estimates, in both current and constant dollars, for the fish processing industry. The GDP figures in current dollars are available only to 2002, while constant dollar estimates cover the whole period from 1997 to 2005. BC Stats derives its own estimates of current dollar GDP for each industry, using methods that mirror, as much as possible, those employed by Statistics Canada. In the case of the fish processing industry, the constant dollar figures are "inflated" into current dollar estimates using information on price changes for processed fish and seafood products over time.

Revenue for the fish processing industry is equal to the value of shipments as reported by Statistics Canada.

Employment in the industry comes from unpublished Labour Force Survey data provided to BC Stats.

Wages and Salaries in this industry were calculated using information from T4 forms to allocate total wages in the manufacturing sector among its component industries.

7. The "50% Rule" and how it applies

Because there is some overlap between the fish catching and processing industries, it may be useful at this point to describe how an establishment is assigned to a particular industry. It is important to bear in mind that all of this work is based on industry definitions developed by Statistics Canada, as they underlie many of the data series were used in this study.

Statistics Canada bases its determination of the industry to which an establishment[23] is allocated on what BC Stats calls the "50% rule". Simply put, this rule says that an establishment is assigned to the industry corresponding to its primary activity. If an establishment operates both a fishing fleet and a fish processing facility, it will be considered part of the fishing industry if the activity that accounts for most of its output is fishing, and part of the fish processing industry if its primary activity is fish processing. In the case of an establishment that is engaged in two activities, it is allocated to the industry which accounts for more than 50% of its output; hence it is referred to as the "50%" rule.

Based on this method, estimates of GDP, employment, wages and so on for the fishing industry will include some fish processing activities; conversely, some of the fish processing estimates will include revenue, GDP, or employment that is related to commercial fishing.

It is worth noting that a fish-farming establishment that both raises and processes fish would be allocated to the aquaculture sector unless fish processing is its main activity. However, if a fish farmer (or commercial fisherman) sells fish to a processing outfit, the output, employment, wages and so on related to the fishing activity would be allocated to aquaculture or commercial fishing, while the processing activity would go to the fish processing industry.

8. Defining the sport fishing industry

Unlike the commercial fishery, aquaculture, and fish processing, sport fishing is not a standard industry for which there is a widely accepted definition. Statistics Canada does not include "sport fishing" as one of the industries in the Standard Industrial Classification; instead, sport fishing activities are imbedded in the data for a number of other service industries.

This is not a problem unique to the sport fishery. The economy is constantly evolving, and new types of activities are gaining importance as consumer tastes and preferences change. Some activities previously not considered

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[23] *An establishment is the smallest unit for which statistics such as employment, salaries, sales, shipments or revenue, and expenses are recorded.*

important enough or large enough to merit their own grouping are now emerging as major drivers in the new economy (tourism and high technology are two such sectors). It therefore has become necessary to disentangle the information related to these sectors from the various industries in which they have been imbedded.

The methods used to derive estimates for sectors such as high technology and tourism helped form the framework within which the sport fishing industry was defined. In fact, BC Stats drew heavily on its earlier work when addressing the issue of how to define the sport fishing industry. The first challenge in the previous exercises was to come up with an acceptable definition of the industry.

In consultation with the Ministry of Environment (including the working group for the Sport Fishing Regional Economic Impact Survey[24]) the sport fishing industry was initially defined to include all establishments that sell directly to sport fishermen. The narrowest definition of sport fishing thus includes the following industries, which make direct sales to anglers:

- Angling guides and charter operators;
- Resorts and fish camps;
- Boat rentals and marinas;
- Retail outlets selling directly to sport fishers (e.g., fish and tackle shops, sporting goods stores, boat and outboard motor retailers, and so on);
- Air, rail, water and other transportation industries which transport sport fishermen travelling to and from BC and within the province;
- Hotels, motels, campgrounds, and other accommodation providers; and
- Restaurants, bars, and other food and beverage establishments.

Other activities such as manufacturing and wholesaling were also examined. However, manufacturing and wholesaling outlets were excluded from the definition because they did not sell directly to anglers[25].

The data underlying the estimates presented here is reported on an industry basis, and it was not possible to disentangle the information for individual establishments. Instead, it was necessary to determine what share of the total activities of each industry should be assigned to sport fishing. Therefore, the "50% rule" could not be applied. Instead, it was necessary to devise a method for determining an appropriate sport fishing share for the various industries that sell directly to anglers.

The relationship between sport fishing and the tourism sector complicated the issue. Many sport fishing activities are also tourist activities, as anyone who

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[24] *A pilot study undertaken by BC Stats and the Ministry of Fisheries in 1999, which was expanded to cover all regions of the province in 2000.*

[25] *While wholesale activities are not explicitly included in the definition, a small percentage of wholesaling activity is deemed to be tourism-related, and the angler share of this total was included in the sport fishing data.*

travels 80 kilometres or more from their home for business, pleasure, or to visit friends or family, is considered a tourist. In order to ensure consistency with the previously published tourism estimates, data for the sport fishery was linked to these numbers.

9. Relationship between sport fishing and tourism industries

Tourism GDP estimates are generated by allocating a (usually fixed) percentage of the total GDP for each service-producing industry to tourism. For example, it is assumed that nearly all (99.5%) passenger air transportation is tourism-related. These tourism ratios vary from industry to industry. They are highest in the transportation, accommodation and food services industries, and lowest in industries where there is a relatively small tourism component (for example, about 2% of the activity of garages is estimated to be tourism-related). Certain service industries (e.g., doctor's offices) are deemed to have no tourism-related component, so the tourism ratio is set to zero.

Some sport fishers do not travel 80 kilometres or more from home in order to fish. Their expenditures on fuel, sporting goods and equipment (including boats) have been explicitly included in these estimates, but some tourist-type spending by non-tourists anglers may be under-estimated in this data. However, it should also be noted that the tourism GDP estimates include a business travel component, which might be quite substantial. By allocating a percentage of tourism activities to sport fishing, we are de facto overestimating the impact the sport fishery has, as some of tourism activities are related to business, not recreational, travel.

10. Determining sport fishing shares

Freshwater and saltwater angler expenditures for each year were calculated by multiplying data on the total number of angler licences sold by average expenditures from the five-yearly Fisheries & Oceans Canada angler surveys. Expenditures included all direct angling expenditures (food and lodging, transportation, fishing services, fishing supplies and equipment, packages and other expenditures), plus major purchases (e.g., vehicles, boats and so on) that were wholly attributable to angling. Purchases that were only partly attributable to angling were excluded from the estimated expenditures.

For the years between surveys, average angler expenditures for each relevant expenditure category (as outlined above) were linearly interpolated. For the period from 2000 on, price indices corresponding to the goods and services in each category were used to extend the average expenditure data. This assumes that changes in the average amount spent by each angler are due to price rather than behavioural changes. These average expenditure estimates were then combined with data on the number of fresh and tidal water angling licences sold in each year to create a time series of expenditures for the major categories. Expenditure estimates were generated for both freshwater and saltwater anglers.

The derived time series was then compared to other data on spending by individuals, which comes from the provincial economic accounts. Detailed data on personal spending on goods and services were aggregated into groups that corresponded to the categories used in the expenditure survey. For example, transportation was defined to include motor vehicle maintenance services, parts, fuel, air, rail, bus, water and other transportation, plus vehicle rentals. Similarly, food and lodging corresponds to total spending on accommodation, and at restaurants, taverns and bars. Expenditures on fishing supplies and equipment were compared to total spending on sporting and camping equipment, while fishing services were compared to total expenditures on recreational services. Data on purchases of vehicles and equipment were also compared to the derived expenditure figures.

In most cases, the relationship between sport fishing expenditure estimates based on the Fisheries & Oceans Canada survey and personal expenditure data fell within the bounds of what might be expected. For example, estimated angler expenditures on food and lodging were approximately 3% of total food and lodging costs in BC for 1999. This was consistent with other data on angler activity. However in some cases, the percentages based on this methodology were too high to be realistic. Using this method, the sport fishing component of total spending on boats and aircraft would have exceeded 100% in certain years.

The ratio of survey-based expenditure estimates to total personal spending in BC was used to allocate industry totals for:

- air and water transportation, plus vehicle rentals;
- motor home and trailer retailers;
- gasoline service stations, auto parts and garages;
- sporting goods;
- accommodation; and
- food and beverage services.

For air and water transportation, accommodation and food and beverage services, sport fishing estimates were determined by applying the appropriate expenditure ratio[26] to the tourism component of each industry.

For retailers of boats and accessories, sporting goods, gasoline service stations, and boat rentals and marinas, the sport fishing estimate was based on total activity (tourism and non-tourism related) in the relevant industry. This was done in order to capture expenditures made by sport fishermen who might not have to travel 80 kilometres or more from home in order to fish. It was assumed that: 50% of boat purchases and 50% of marina and boat rental activities were related to sport fishing. For gasoline, the "transportation" ratio

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[26] *More details on the tourism and sport fishing proportions used for each industry are available in the supplementary methodology notes.*

derived from the angler expenditure data was applied to the total for gas stations.

Both tourist and resident anglers purchase sporting goods such as rods or reels in order to engage in their sport. However, the sport fishing ratio implicit in the angler survey was too high to be realistic, given that this category includes everything from athletic clothing and footwear to playground equipment, and equipment for sports such as golf, hockey, or skiing. The expenditure-based ratio was adjusted down in the pre-1992 period to correct for this, but was used for the years from 1993 on[27].

The goal of developing estimates for the sport fishing industry that would be comparable with those for other industries, together with the relationship between sport fishing and tourism, made it necessary to develop a sport fishing proportion for every industry with a tourism component. This is because it did not make sense to allocate part of the activities of, say, a food retailer, to tourism and ignore the fact that some tourists are also sport fishers.

An estimate of the percentage of tourists that are sport fishers was derived using data on angling licences, information from the Canadian Travel Survey, and Tourism BC's estimates of visitor volumes and revenue.

It was assumed that:

- 80% of Canadian residents who bought angling licences in BC were on overnight trips. This figure was derived by comparing the number of visitors making overnight trips with an estimate of anglers, based on information from the Canadian Travel Survey on the number of Canadians travelling within Canada who said that fishing was one of the activities in which they participated.
- Every non-Canadian who purchased an angling licence in BC was on an overnight trip to the province.

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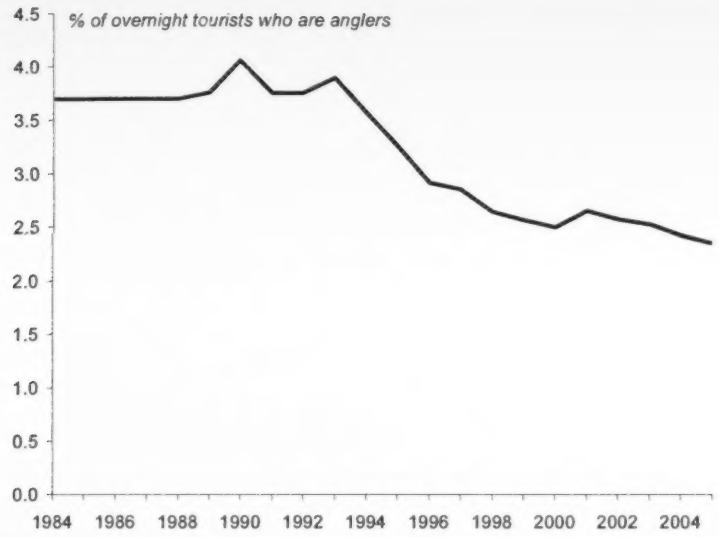
[27] *In the 2000 edition of this report, the estimates had been modified by applying the ratio only to the tourism component of GDP/employment, etc for sporting goods retailers. However, this significantly under-represented the angling share, relative to what other data suggest would be appropriate.*

The percentage of overnight tourists who are anglers is declining



Source: BC Stats
Figure 46

This information was used to generate annual estimates of the percentage of overnight tourists who were also anglers. The ratios were also generated for both freshwater and saltwater anglers.

For all activities included in Tourism GDP but not mentioned in the previous section, the percentage of tourists who were also anglers was applied to the tourism data for the appropriate industries.

The overall estimates of GDP, revenue, employment or wages for this industry were calculated by summing up the sport fishing components for all industries.

Appendix 1 outlines the methods used to determine appropriate shares for each component of the sport fishing industry.

11. Commercial fishing boats versus those used in the sport fishing industry: why are they treated differently?

A major cost incurred by fish boat operators is for capital equipment: the boats and other gear that they need in order to harvest the fish. Similarly, a fish farmer uses pens, nets and other equipment. And a fish processing firm must also invest in capital equipment before it can begin operations. The initial capital outlay required to purchase this equipment is large, but because it usually has a long life span, the cost is amortized over several years. In other words, the cost of the equipment is treated as an annual expense over its expected lifetime rather than as a one-time purchase by the business.

The initial cost is incurred because the equipment is used to generate income. A producer who purchases a piece of equipment expects that the price received for his/her product will cover its amortized cost. In economic accounting, an estimate of the value of the income generated by the equipment is included in GDP, in the same way that the value of the work done by an employee is.

One way of looking at this is to say that the owner of the boat expects to earn enough income over time to pay for the boat. Presumably, the value of the boat represents the expected income stream arising from its use, and a portion of this value–the depreciation on the equipment–is included in the GDP figure for each year in the life of the equipment.

In the commercial fishing industry, the income accruing to capital is amortized over the life of the equipment. This is because the equipment is purchased–just as labour is–as one of the inputs needed to produce the product. In other words, the value of a boat purchased by a commercial fisher in the province shows up in the GDP of the fishery over the period of its expected life.

If an establishment that caters to sport fishers purchases a boat, it would be treated in a similar manner. It would be viewed as a capital purchase required for doing business whose cost is amortized over the life of the asset.

In the sport fishing industry, boats, gear and other equipment purchased by individual sport fishers are viewed somewhat differently. They are final products, not inputs into a production process. Owning and using them is part of the sport fishing experience, just as owning and using skis is part of the skiing experience. Boats and gear purchased by sport fishers represent a consumer purchase. Their value is reflected in the GDP of the industries that produce and market them in the year in which they are purchased.

The definition of the sport fishery adopted in this study includes establishments which sell directly to sport fishers, plus those in the tourism sector (e.g., souvenir stores, or museums) which may benefit from the presence of sport fishers in the province. Using this definition, the activity associated with the manufacture of boats or gear is not included in the value of the sport fishery. However, boat retailing activities are, because the retailer deals directly with the sport fisher.

Appendix II: Data Sources

Data from various studies of the commercial and recreational fishing industries were used to derive the estimates of GDP, employment, wages and revenue for the four industries presented in this study. This section outlines the data sources for each of the six indicators included in this report.

1. Gross Domestic Product

The GDP data used to derive the estimates in this report comes from Statistics Canada's Industry Measures and Analysis Division. Summary statistics are available from Statistics Canada's electronic database, but more detailed unpublished information was used by BC Stats. Estimates for the commercial fishing, aquaculture, fish processing and sport fishing industries were derived from these numbers. Commercial fishing and aquaculture data are based on the Statistics Canada estimates of GDP in the fishing and trapping industry. GDP in fish processing is obtained directly from Statistics Canada. Finally, the GDP estimate for the sport fishing industry was derived based on sport fishing's share of the output of various industries where there is a sport fishing or tourism-related component. Specific data sources are identified below.

- The value and volume of the commercial catch, from the Ministry of Environment and Fisheries & Oceans Canada.
- The value and volume of aquaculture production, from the Ministry of Environment and Statistics Canada.
- Data on revenue and expenditures of the fishing fleet, from various reports prepared by ARA Consulting and GS Gislason & Associates Inc.
- Financial statistics relating to aquaculture production for 1997-1999, from the Agriculture Division of Statistics Canada.
- Cost and return studies for finfish and shellfish farming, various Ministry of Environment reports.
- Total angling licence sales, freshwater (BC Fisheries) and saltwater (Fisheries & Oceans Canada) anglers.
- Spending estimates from the 1980, 1985, 1990 and 1995 surveys of recreational anglers, Fisheries & Oceans Canada
- Data on characteristics of tourists, from the Canadian travel survey.
- Data on tourism volumes and revenue, from Tourism BC, supplemented by information from Statistics Canada for earlier years.
- Tourism GDP estimates, and tourism proportions from BC Stats' tourism accounts.
- Room revenue by accommodation category, from BC Stats' tourism room revenue report.

- Personal expenditure estimates (by type of expenditure) from the Income and Expenditure Accounts Division of Statistics Canada (unpublished data).
- Revenue data from various Statistics Canada surveys, including annual and monthly surveys of retail and wholesale trade, annual surveys of transportation (air, rail, bus, shipping) and communication industries, accommodation services, food and beverage services, leisure and personal services industries, and the business service industries.

2. Revenue

Data sources used to calculate revenue include:

- Value of fish landings, from the Ministry of Environment and Fisheries & Oceans Canada
- Value of aquaculture production, from the Ministry of Environment and Statistics Canada
- Shipments of processed fish and seafood products, from the annual and monthly Surveys of Manufacturers conducted by Statistics Canada.
- Revenue for the sport fishing industry is based on the same information that is used to derive the GDP figures.

> When annual data on revenue and expenses are available, they are used to calculate GDP for an industry. However, the detailed information required is not always available, or may only be available for selected years. If the data do not extend to the latest year, or if the information is available only for certain years, GDP estimates for the intervening period are often calculated by assuming that the relationship between GDP and output in that industry does not change substantially from year to year. This is usually a safe assumption.

3. Employment

Employment estimates are based on information from Statistics Canada's Labour Force Survey, including both published and unpublished data. However, employment estimates for the sport fishing industry are based on the tourism employment figures, which come from the Survey of Employment, Earnings and Hours.

4. Wages and salaries

Labour income estimates come from the Income and Expenditure Accounts Division of Statistics Canada. They are based on Canada Revenue Agency records from T4 slips. Because Canada Revenue Agency data is not available until about a year and a half after the end of the reference year, data for the most recent year(s) is estimated by Statistics Canada using information from

the Labour Force Survey. Once the Canada Revenue Agency numbers are available, the estimates are recalibrated.

5. Exports and Imports

- Data on exports of fish and seafood products are based on information provided to BC Stats by Statistics Canada. It is compiled from export documents filed at Canadian customs ports or, in the case of exports to the US, from import data provided by American authorities.
- Import estimates were calculated using data on imports clearing customs in BC. These estimates were adjusted using information from the BC Input/Output model and the Interprovincial Trade Flows project to exclude imports entering the country via BC, but destined for use elsewhere. The import figures are therefore intended to show the value of imported fish and seafood products consumed in BC.

6. Establishment Counts

The establishment counts presented in this paper are derived from Statistics Canada's business register.

Statistical Tables

Table 1: Real gross domestic product at basic prices
($1997 million)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery																						
Salmon	62	104	88	41	62	112	129	94	69	117	77	21	23	39	11	4	8	6	11	10	10	6
Herring	19	20	13	24	24	33	39	39	35	44	37	27	22	32	25	15	17	10	15	16	11	8
Halibut	8	13	16	12	16	13	13	11	12	18	15	14	14	21	15	13	14	11	18	19	18	17
Groundfish	24	30	37	33	39	45	54	58	56	56	45	38	38	44	36	31	31	25	27	28	29	29
Geoducks & Clams	28	45	46	42	39	38	43	34	31	29	24	23	20	24	18	15	18	15	17	17	16	14
Other	6	8	9	12	13	15	18	22	32	39	33	38	43	40	26	21	27	28	26	37	39	27
Commercial Total[†]	***148***	***219***	***209***	***165***	***194***	***256***	***295***	***259***	***235***	***303***	***232***	***160***	***158***	***200***	***130***	***100***	***115***	***94***	***114***	***128***	***126***	***103***
Aquaculture																						
Salmon	0	0	1	5	16	31	41	66	51	63	57	66	67	84	67	92	111	159	167	151	150	214
Shellfish	3	3	3	3	3	3	4	5	6	6	7	10	11	9	6	8	11	16	17	20	23	31
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Aquaculture Total[†]	***3***	***4***	***4***	***8***	***20***	***35***	***46***	***71***	***57***	***69***	***65***	***75***	***78***	***93***	***78***	***103***	***124***	***191***	***202***	***186***	***189***	***274***
Fish Processing[†]	***172***	***197***	***155***	***178***	***224***	***225***	***215***	***173***	***164***	***217***	***231***	***188***	***157***	*	***142***	***172***	***169***	***214***	***216***	***191***	***169***	***173***
Sport Fishing																						
Saltwater	145	161	167	173	178	178	178	159	151	157	150	147	138	133	129	132	120	130	126	122	135	135
Freshwater	107	113	116	121	125	126	133	123	116	125	125	126	120	114	115	117	108	112	107	95	109	112
Sport Fishing Total	***253***	***274***	***283***	***294***	***303***	***304***	***311***	***282***	***267***	***282***	***276***	***273***	***259***	***246***	***244***	***249***	***228***	***242***	***232***	***217***	***245***	***248***
Total, Fisheries & Aquaculture	***575***	***693***	***650***	***645***	***741***	***820***	***867***	***784***	***724***	***871***	***803***	***696***	***651***	*	***594***	***624***	***636***	***741***	***765***	***722***	***728***	***798***
All Industries in BC[†]	***68,189***	***71,492***	***72,647***	***76,515***	***79,923***	***83,107***	***84,696***	***85,837***	***88,713***	***92,947***	***97,179***	***99,516***	***101,209***	***104,554***	***105,827***	***109,008***	***113,919***	***115,139***	***118,847***	***121,817***	***126,857***	***131,440***
Goods-producing Industries[†]	***21,830***	***22,975***	***23,510***	***24,862***	***26,032***	***26,690***	***25,902***	***25,400***	***25,554***	***26,467***	***26,918***	***27,079***	***26,816***	***27,806***	***27,199***	***28,503***	***30,632***	***30,038***	***30,510***	***31,435***	***33,825***	***35,135***
Resource Industries	*13,328*	*14,087*	*13,984*	*16,048*	*16,624*	*16,227*	*15,206*	*14,429*	*14,563*	*15,631*	*15,473*	*15,620*	*15,038*	*15,732*	*15,489*	*16,474*	*17,325*	*17,126*	*17,444*	*17,691*	*19,211*	*19,813*
of which: Agriculture[†]	*620*	*586*	*613*	*619*	*720*	*654*	*633*	*644*	*692*	*725*	*703*	*803*	*843*	*814*	*786*	*827*	*803*	*893*	*878*	*959*	*960*	*972*
Service-producing Industries[†]	***46,530***	***48,698***	***50,291***	***51,837***	***54,084***	***56,615***	***58,937***	***60,509***	***63,158***	***66,449***	***70,215***	***72,421***	***74,395***	***76,748***	***78,636***	***80,518***	***83,343***	***85,131***	***88,101***	***90,149***	***92,832***	***96,112***
Special Aggregations																						
High Technology	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*5,096*	*5,492*	*5,956*	*7,220*	*7,215*	*7,510*	*7,983*	*8,354*	*na*
Tourism	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*4,700*	*4,713*	*4,758*	*4,891*	*4,909*	*4,906*	*4,975*	*5,176*	*5,424*

Source: BC Stats & Statistics Canada

[†] Statistics Canada's published estimates are in chained 1997 dollars. Agriculture estimates have been adjusted to exclude fish & seafood farming.

** Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement.*

Table 1a: Real gross domestic product at basic prices (annual % change)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery																					
Salmon	67.8	-15.1	-52.9	48.9	81.9	14.8	-26.8	-26.9	70.2	-33.9	-73.3	9.0	75.2	-73.3	-66.7	135.5	-31.6	101.4	-13.0	5.1	-45.9
Herring	2.9	-32.4	80.0	0.3	36.3	17.2	1.3	-11.2	25.4	-14.5	-29.2	-18.8	46.4	-21.7	-40.3	13.4	-40.1	50.9	8.4	-31.1	-27.4
Halibut	56.6	22.0	-20.7	29.3	-16.5	-5.4	-11.0	9.9	48.4	-17.9	-5.4	-0.4	51.7	-31.3	-9.8	5.2	-24.4	67.5	8.2	-5.0	-6.5
Groundfish	23.7	22.4	-10.9	20.2	14.7	19.1	7.5	-3.1	0.1	-18.9	-16.2	-6.2	24.0	-18.2	-13.7	-1.4	-17.8	7.9	3.9	3.5	0.4
Geoducks & Clams	61.5	1.5	-8.2	-8.0	-3.3	13.5	-19.6	-9.2	-7.9	-16.7	-5.2	-10.0	16.6	-25.2	-13.7	15.7	-17.8	15.2	1.3	-4.6	-14.3
Other	26.8	18.0	26.6	15.0	12.5	22.5	18.6	44.9	22.2	-15.9	15.2	15.4	-8.8	-34.0	-17.6	25.6	4.5	-8.0	40.8	6.1	-31.6
Commercial Total	*48.6*	*-4.8*	*-21.2*	*17.6*	*32.5*	*15.1*	*-12.3*	*-9.2*	*28.8*	*-23.4*	*-31.1*	*-1.3*	*26.9*	*-35.0*	*-23.0*	*14.5*	*-17.5*	*20.9*	*11.8*	*-1.6*	*-17.8*
Aquaculture																					
Salmon	13.8	212.1	420.7	246.0	89.6	32.2	59.6	-22.2	22.8	-9.5	15.4	1.9	26.0	-20.1	37.0	19.7	44.0	4.6	-9.3	-1.0	43.1
Shellfish	18.9	-15.7	24.9	6.9	0.6	22.3	14.3	15.7	9.5	20.9	27.4	16.5	-23.1	-25.8	27.6	32.5	54.5	0.8	22.6	14.0	35.3
Other	17.1	21.6	-10.9	25.6	-23.9	26.6	3.9	-32.0	-33.6	47.0	13.0	-12.9	88.0	-72.2	45.9	-19.9	129.9	-0.7	107.2	21.5	25.6
Aquaculture Total	*18.3*	*5.0*	*119.0*	*145.8*	*72.8*	*31.2*	*55.1*	*-19.7*	*21.3*	*-6.7*	*16.8*	*3.7*	*19.2*	*-16.0*	*31.3*	*20.3*	*54.4*	*5.9*	*-7.9*	*1.4*	*45.2*
Fish Processing	*14.6*	*-21.2*	*14.7*	*26.1*	*0.4*	*-4.3*	*-20.0*	*-4.5*	*32.0*	*6.5*	*-18.9*	*-16.6*	*	*	*21.3*	*-1.8*	*26.2*	*1.2*	*-11.9*	*-11.5*	*2.5*
Sport Fishing																					
Saltwater	10.6	3.8	3.9	2.6	0.0	-0.1	-10.4	-5.3	3.9	-4.2	-2.2	-5.9	-4.0	-2.5	2.1	-9.3	8.7	-3.2	-2.9	10.8	-0.2
Freshwater	4.8	2.6	4.4	3.6	1.0	5.1	-7.3	-5.3	7.7	-0.1	0.6	-4.7	-5.4	0.8	1.9	-7.3	3.2	-4.6	-10.9	15.2	2.9
Sport Fishing Total	*8.2*	*3.3*	*4.1*	*3.0*	*0.4*	*2.1*	*-9.1*	*-5.3*	*5.5*	*-2.3*	*-0.9*	*-5.4*	*-4.7*	*-1.0*	*2.0*	*-8.4*	*6.1*	*-3.9*	*-6.6*	*12.7*	*1.2*
Total, Fisheries & Aquaculture	*20.5*	*-6.2*	*-0.9*	*14.9*	*10.7*	*5.6*	*-9.5*	*-7.7*	*20.4*	*-7.8*	*-13.4*	*-6.5*	*	*	*5.0*	*1.8*	*16.6*	*3.3*	*-5.7*	*0.9*	*9.6*
All Industries in BC	*4.8*	*1.6*	*5.3*	*4.5*	*4.0*	*1.9*	*1.3*	*3.4*	*4.8*	*4.6*	*2.4*	*1.7*	*3.3*	*1.2*	*3.0*	*4.5*	*1.1*	*3.2*	*2.5*	*4.1*	*3.6*
Goods-producing Industries	*5.2*	*-2.0*	*10.4*	*4.7*	*2.5*	*-3.0*	*-1.9*	*0.6*	*3.6*	*1.7*	*0.6*	*-0.9*	*3.7*	*-2.2*	*4.8*	*7.5*	*-1.9*	*1.6*	*3.0*	*7.6*	*3.9*
Resource Industries	*5.7*	*-0.7*	*14.8*	*3.6*	*-2.4*	*-6.3*	*-5.1*	*0.9*	*7.3*	*-1.0*	*0.9*	*-3.7*	*4.6*	*-1.5*	*6.4*	*5.2*	*-1.1*	*1.9*	*1.4*	*8.6*	*3.1*
of which: Agriculture	*-5.4*	*4.6*	*0.9*	*16.3*	*-9.1*	*-3.2*	*1.7*	*7.4*	*4.7*	*-2.9*	*14.1*	*5.0*	*-3.4*	*-3.5*	*5.3*	*-2.9*	*11.2*	*-1.7*	*9.2*	*0.1*	*1.2*
Service-producing Industries	*4.7*	*3.3*	*3.1*	*4.3*	*4.7*	*4.1*	*2.7*	*4.4*	*5.2*	*5.7*	*3.1*	*2.7*	*3.2*	*2.5*	*2.4*	*3.5*	*2.1*	*3.5*	*2.3*	*3.0*	*3.5*
Special Aggregations:																					
High Technology	-	-	-	-	-	-	-	-	-	-	-	-	-	*7.8*	*8.4*	*21.2*	*-0.1*	*4.1*	*6.3*	*4.6*	-
Tourism	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.3*	*1.0*	*2.8*	*0.4*	*-0.1*	*1.4*	*4.0*	*4.8*

Source: BC Stats & Statistics Canada

[1] *Statistics Canada's published estimates are in chained 1997 dollars. Agriculture estimates have been adjusted to exclude fish & seafood farming.*

** Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement.*

Prepared by: BC Stats

Table 2: Gross domestic product at basic prices ($million)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery																						
Salmon	89.9	15.5	171.2	137.3	208.6	184.7	182.8	127.0	132.5	136.4	174.9	49.9	58.2	39.5	17.6	6.8	11.6	5.5	13.7	10.4	16.5	8.4
Herring	27.6	3.8	29.8	69.5	64.5	55.0	56.6	52.0	51.7	69.8	69.0	91.3	86.8	31.5	15.7	16.5	15.1	9.0	15.2	12.5	8.4	4.9
Halibut	5.9	1.5	15.7	18.3	15.5	13.5	14.6	19.3	18.6	25.8	29.5	31.4	28.7	21.5	13.0	16.5	17.5	11.5	18.7	19.4	20.0	19.6
Groundfish	20.5	2.2	27.6	38.8	38.3	41.1	47.8	72.2	64.0	56.0	63.1	73.8	58.9	44.2	43.4	40.0	37.0	26.2	33.1	35.0	37.4	38.7
Geoducks & Clams	5.1	1.8	6.2	10.0	13.0	16.6	13.1	13.2	18.7	29.1	34.1	50.9	41.3	23.8	20.5	20.9	23.1	17.4	23.3	19.3	19.5	18.9
Other	6.8	1.1	7.4	10.8	11.3	15.2	16.5	21.9	30.0	32.3	37.5	55.5	60.2	39.5	27.6	29.2	35.1	33.4	32.1	42.6	50.0	44.8
Commercial Total	156.7	23.8	258.0	284.8	351.2	326.0	331.5	305.6	315.4	349.5	407.9	352.7	334.2	200.0	137.8	129.8	139.3	103.2	136.2	139.2	151.9	135.4
Aquaculture																						
Salmon	0.3	1.4	1.3	6.2	18.7	28.6	37.7	53.1	55.3	66.2	73.7	81.6	74.7	84.4	84.3	116.7	129.1	108.9	58.3	51.6	43.4	61.4
Shellfish	1.8	1.3	2.2	2.3	2.4	2.7	3.3	3.6	4.3	4.9	6.3	9.3	10.9	8.5	7.1	8.9	12.9	16.0	8.3	10.1	8.6	9.6
Other	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.2	0.2	0.3	0.4	0.4
Aquaculture Total	2.4	2.9	3.8	8.7	21.4	31.5	41.2	57.0	59.7	71.2	80.2	91.1	85.8	93.2	91.6	125.7	142.1	125.1	66.8	61.9	52.4	71.4
Fish Processing	172.2	19.2	168.5	176.0	265.4	229.7	252.1	233.9	175.3	241.7	395.7	381.1	252.7	*	168.4	209.4	195.2	236.4	228.3	182.3	168.1	173.4
Sport Fishing																						
Saltwater	87.6	10.4	114.0	120.5	128.1	135.0	140.1	137.9	135.8	144.8	140.5	141.0	138.4	132.8	131.2	138.0	128.6	142.5	141.7	136.1	156.1	157.6
Freshwater	65.4	7.6	80.6	84.7	91.0	96.7	105.5	106.7	105.5	116.7	118.1	121.7	120.8	113.7	116.1	121.5	115.8	121.9	119.2	105.1	125.3	130.2
Sport Fishing Total	153.0	17.1	194.5	205.1	219.2	231.7	245.6	244.6	241.3	261.5	258.6	262.7	259.2	246.5	247.4	259.6	244.4	264.4	260.9	241.2	281.4	287.8
Total, Fisheries & Aquaculture	483.3	60.0	624.8	674.5	857.2	818.9	870.4	841.0	791.7	923.9	1,142.4	1,087.6	931.9	*	643.1	724.4	721.0	729.1	692.1	624.7	653.9	668.0

Source: BC Stats & Statistics Canada

* Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement.

Table 2a: Gross domestic product at basic prices (annual % change)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery																					
Salmon	68.5	13.0	-19.8	52.0	-11.5	-1.0	-30.5	4.3	3.0	28.2	-71.5	16.7	-32.2	-55.3	-61.5	70.5	-52.2	148.2	-24.5	59.4	-49.2
Herring	40.7	-23.1	133.0	-7.2	-14.7	2.8	-8.1	-0.6	35.0	-1.1	32.3	-4.9	-63.7	-50.3	5.1	-8.3	-40.2	68.6	-17.8	-32.5	-41.6
Halibut	44.7	85.1	17.0	-15.4	-13.1	8.5	32.2	-3.7	38.9	13.9	6.5	-8.5	-25.3	-39.7	27.0	6.1	-33.9	61.8	3.8	3.1	-1.8
Groundfish	3.5	30.5	40.4	-1.2	7.2	16.5	51.0	-11.4	-12.5	12.8	16.9	-20.2	-25.0	-1.7	-7.9	-7.5	-29.0	26.1	5.9	6.9	3.4
Geoducks & Clams	13.9	6.2	61.8	29.7	27.8	-21.1	0.3	42.1	55.7	16.9	49.3	-18.8	-42.3	-14.1	1.9	10.6	-24.5	33.9	-17.2	1.2	-3.3
Other	-10.9	22.9	45.9	4.3	34.0	8.9	32.4	37.1	7.8	15.9	48.1	8.5	-34.4	-30.1	5.8	20.0	-4.7	-3.9	32.8	17.3	-10.3
Commercial Total	**48.9**	**11.3**	**10.4**	**23.3**	**-7.2**	**1.7**	**-7.8**	**3.2**	**10.8**	**16.7**	**-13.5**	**-5.3**	**-40.1**	**-31.1**	**-5.8**	**7.3**	**-25.9**	**32.0**	**2.3**	**9.1**	**-10.9**
Aquaculture																					
Salmon	16.8	232.7	371.8	203.6	52.8	31.6	41.0	4.1	19.7	11.3	10.8	-8.5	13.0	0.0	38.3	10.6	-15.6	-46.4	-11.6	-15.9	41.5
Shellfish	24.1	-3.2	2.8	7.6	9.3	23.9	10.6	17.4	14.8	28.4	47.8	17.2	-21.9	-16.2	24.5	45.3	24.0	-48.3	21.6	-14.7	12.5
Other	0.5	30.8	-22.3	14.3	-25.9	43.3	0.4	-39.8	-20.7	46.3	14.4	-9.1	52.4	-57.2	15.6	-15.7	72.8	-17.0	42.9	50.0	-6.7
Aquaculture Total	**20.8**	**31.5**	**127.2**	**147.3**	**46.9**	**31.1**	**38.3**	**4.7**	**19.2**	**12.6**	**13.7**	**-5.9**	**8.6**	**-1.7**	**37.2**	**13.0**	**-12.0**	**-46.6**	**-7.3**	**-15.4**	**36.4**
Fish Processing	***15.7***	***-15.4***	***4.5***	***50.8***	***-13.5***	***9.8***	***-7.3***	***-25.0***	***37.9***	***63.7***	***-3.7***	***-33.7***	*	*	***25.8***	***-6.8***	***21.1***	***-3.4***	***-20.1***	***-7.8***	***3.1***
Sport Fishing																					
Saltwater	16.9	11.2	5.7	6.4	5.4	3.7	-1.5	-1.6	6.7	-3.0	0.3	-1.8	-4.0	-1.2	5.2	-6.8	10.8	-0.6	-3.9	14.7	0.9
Freshwater	11.0	11.0	5.1	7.5	6.2	9.1	1.1	-1.1	10.6	1.2	3.0	-0.7	-5.9	2.1	4.7	-4.7	5.3	-2.2	-11.8	19.2	3.9
Sport Fishing Total	**14.4**	**11.1**	**5.4**	**6.8**	**5.7**	**6.0**	**-0.4**	**-1.4**	**8.4**	**-1.1**	**1.6**	**-1.3**	**-4.9**	**0.4**	**4.9**	**-5.8**	**8.2**	**-1.3**	**-7.5**	**16.7**	**2.3**
Total, Fisheries & Aquaculture	***26.0***	***2.6***	***8.0***	***27.1***	***-4.5***	***6.3***	***-3.4***	***-5.9***	***16.7***	***23.7***	***-4.8***	***-14.3***	*	*	***12.6***	***-0.5***	***1.1***	***-5.1***	***-9.7***	***4.7***	***2.2***

Source: BC Stats & Statistics Canada

** Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement*

Table 3: Employment (based on data from the Labour Force Survey)
(thousands)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery	*4.1*	*6.4*	*6.6*	*6.0*	*6.3*	*7.0*	*6.6*	*6.6*	*4.8*	*6.2*	*6.2*	*4.4*	*5.1*	*5.3*	*3.3*	*3.6*	*4.2*	*4.5*	*3.0*	*4.4*	*2.8*	*2.0*
Aquaculture	*0.9*	*1.0*	*1.0*	*1.6*	*1.3*	*1.4*	*1.5*	*1.5*	*1.7*	*1.6*	*1.5*	*1.4*	*1.7*	*1.8*	*1.4*	*1.5*	*1.9*	*1.8*	*1.6*	*1.5*	*1.6*	*2.1*
Fish Processing	*4.1*	*2.8*	*4.4*	*4.2*	*3.6*	*4.1*	*3.0*	*3.2*	*5.3*	*3.0*	*4.7*	*3.7*	*3.3*	*3.8*	*2.6*	*2.5*	*2.2*	*3.8*	*6.0*	*4.8*	*4.9*	*3.7*
Sport Fishing	*6.1*	*7.1*	*7.3*	*7.6*	*7.9*	*9.1*	*9.7*	*8.3*	*8.2*	*8.2*	*8.0*	*8.0*	*7.6*	*7.5*	*6.8*	*7.5*	*6.9*	*7.6*	*7.0*	*6.4*	*7.9*	*7.7*
Saltwater	3.3	4.1	4.3	4.5	4.8	5.6	5.5	4.7	4.6	4.5	4.4	4.3	4.1	4.0	3.6	4.0	3.6	4.1	3.8	3.6	4.3	4.2
Freshwater	2.8	3.0	3.0	3.1	3.1	3.6	4.2	3.6	3.6	3.6	3.6	3.7	3.6	3.5	3.2	3.5	3.3	3.5	3.2	2.8	3.6	3.5
Total, Fisheries & Aquaculture	*15.2*	*17.3*	*19.2*	*19.4*	*19.1*	*21.6*	*20.8*	*19.6*	*20.0*	*19.0*	*20.4*	*17.5*	*17.7*	*18.4*	*14.1*	*15.1*	*15.2*	*17.8*	*17.6*	*17.2*	*17.2*	*15.5*
All Industries in BC	*1,248*	*1,274*	*1,329*	*1,378*	*1,435*	*1,509*	*1,560*	*1,578*	*1,617*	*1,668*	*1,743*	*1,786*	*1,816*	*1,861*	*1,858*	*1,894*	*1,931*	*1,922*	*1,965*	*2,015*	*2,063*	*2,131*
Goods-producing Industries	*322*	*330*	*319*	*334*	*352*	*387*	*389*	*378*	*371*	*383*	*402*	*405*	*408*	*417*	*409*	*394*	*406*	*382*	*392*	*416*	*437*	*453*
Resource Industries	*111*	*112*	*107*	*110*	*113*	*116*	*114*	*112*	*110*	*114*	*119*	*117*	*117*	*118*	*116*	*114*	*116*	*117*	*113*	*124*	*120*	*121*
of which: Agriculture & related**	*53*	*55*	*49*	*50*	*49*	*48*	*45*	*48*	*43*	*50*	*50*	*43*	*50*	*54*	*55*	*46*	*49*	*46*	*48*	*58*	*62*	*64*
Service-producing Industries	*926*	*944*	*1,010*	*1,044*	*1,083*	*1,125*	*1,171*	*1,200*	*1,246*	*1,285*	*1,342*	*1,381*	*1,408*	*1,443*	*1,450*	*1,501*	*1,525*	*1,539*	*1,573*	*1,598*	*1,626*	*1,678*
Special Aggregations																						
High Technology*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*55*	*54*	*60*	*64*	*68*	*65*	*66*	*65*	*na*
Tourism*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*112*	*112*	*111*	*112*	*115*	*115*	*117*	*117*	*120*

Source: BC Stats & Statistics Canada

**Employment estimates for these industries are based on Survey of Employment, Payrolls and Hours data. They are not available prior to 1997. Employment estimates for industries such as the commercial fishery, aquaculture and fish processing can show larger than average swings from year to year because they are based on a relatively small sample.*

***Includes related food & beverage processing activities. Figures have been adjusted to exclude fish & seafood farming, as well as seafood processing.*

Table 3a: Employment (based on data from the Labour Force Survey) (annual % change)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery	*58.4*	*2.5*	*-8.9*	*5.0*	*11.1*	*-5.7*	*-0.4*	*-27.0*	*29.4*	*-0.1*	*-28.9*	*15.3*	*3.6*	*-37.3*	*9.3*	*16.7*	*8.3*	*-34.0*	*46.8*	*-36.6*	*-28.3*
Aquaculture	*17.8*	*-6.8*	*64.6*	*-20.9*	*8.5*	*10.0*	*-0.6*	*13.3*	*-6.3*	*-5.7*	*-4.4*	*18.3*	*6.0*	*-22.8*	*8.0*	*26.7*	*-5.3*	*-12.4*	*-2.7*	*4.3*	*31.3*
Fish Processing	*-33.0*	*58.4*	*-3.6*	*-14.3*	*13.9*	*-26.8*	*6.7*	*65.6*	*-43.4*	*56.7*	*-21.3*	*-10.8*	*15.2*	*-31.6*	*-3.8*	*-12.0*	*72.7*	*57.9*	*-20.0*	*2.1*	*-24.5*
Sport Fishing	*15.2*	*2.9*	*5.1*	*3.7*	*15.2*	*5.9*	*-14.1*	*-1.1*	*-0.1*	*-2.3*	*-0.1*	*-4.4*	*-1.9*	*-9.4*	*11.1*	*-8.5*	*10.7*	*-8.1*	*-8.4*	*23.2*	*-3.1*
Saltwater	23.9	5.2	6.1	6.3	14.9	-1.3	-14.2	-1.8	-1.6	-3.7	-2.7	-4.7	-1.0	-10.8	11.8	-9.8	13.2	-7.4	-4.9	19.9	-4.1
Freshwater	5.0	-0.3	3.7	-0.2	15.6	17.4	-14.0	-0.4	1.8	-0.6	3.0	-4.1	-2.9	-7.7	10.2	-7.0	7.9	-9.0	-12.5	27.3	-1.9
Total, Fisheries & Aquaculture	*13.9*	*11.0*	*1.4*	*-1.8*	*13.2*	*-3.8*	*-5.8*	*2.2*	*-5.0*	*7.4*	*-14.1*	*1.0*	*3.6*	*-23.3*	*7.6*	*0.4*	*17.0*	*-1.1*	*-2.5*	*0.3*	*-10.1*
All Industries in BC	*2.1*	*4.3*	*3.7*	*4.2*	*5.1*	*3.4*	*1.1*	*2.5*	*3.1*	*4.5*	*2.4*	*1.7*	*2.4*	*-0.1*	*1.9*	*1.9*	*-0.5*	*2.3*	*2.5*	*2.4*	*3.3*
Goods-producing Industries	*2.4*	*-3.4*	*4.7*	*5.5*	*10.0*	*0.4*	*-2.9*	*-1.8*	*3.2*	*4.9*	*0.9*	*0.8*	*2.2*	*-2.1*	*-3.6*	*3.2*	*-5.9*	*2.6*	*6.2*	*4.9*	*3.6*
Resource Industries	*1.1*	*-4.1*	*2.3*	*2.9*	*3.1*	*-2.1*	*-2.2*	*-1.0*	*3.6*	*4.3*	*-2.3*	*0.6*	*0.8*	*-1.7*	*-2.1*	*2.2*	*0.3*	*-2.7*	*9.1*	*-3.4*	*1.3*
*of which: Agriculture & related***	*4.7*	*-11.7*	*2.4*	*-1.3*	*-2.7*	*-6.3*	*6.0*	*-9.5*	*16.0*	*0.6*	*-15.4*	*16.3*	*8.1*	*2.1*	*-16.3*	*7.2*	*-7.1*	*6.4*	*20.3*	*6.1*	*4.2*
Service-producing Industries	*2.0*	*7.0*	*3.4*	*3.8*	*3.8*	*4.1*	*2.5*	*3.9*	*3.1*	*4.4*	*2.9*	*2.0*	*2.5*	*0.5*	*3.5*	*1.6*	*0.9*	*2.2*	*1.6*	*1.7*	*3.2*
Special Aggregations:																					
*High Technology**	-	-	-	-	-	-	-	-	-	-	-	-	-	*-1.4*	*10.2*	*8.1*	*5.6*	*-3.7*	*1.3*	*-2.4*	-
*Tourism**	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.6*	*-1.1*	*0.9*	*2.2*	*0.4*	*1.3*	*0.5*	*2.2*

Source: BC Stats & Statistics Canada

**Employment estimates for these industries are based on Survey of Employment, Payrolls and Hours data. They are not available prior to 1997. Employment estimates for industries such as the commercial fishery, aquaculture and fish processing can show larger than average swings from year to year because they are based on a relatively small sample.*

***Includes related food & beverage processing activities. Figures have been adjusted to exclude fish & seafood farming, as well as seafood processing.*

Table 4: Wages and salaries
($million)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
*Commercial Fishery**	11.3	15.0	21.3	26.2	35.3	41.4	36.6	23.8	25.3	26.7	32.1	23.6	22.4	18.6	10.3	9.0	10.0	12.1	12.1	12.1	12.5	14.3
*Aquaculture***	0.5	0.4	0.8	1.9	5.3	12.1	14.1	21.9	21.1	23.6	22.2	34.9	31.2	30.0	30.5	35.0	40.0	43.0	48.0	41.0	43.0	41.0
Fish Processing	111.5	119.1	119.3	133.8	149.4	164.9	167.0	187.7	203.0	217.1	205.3	189.7	170.2	153.5	148.5	134.9	134.1	132.4	145.1	137.3	123.5	123.8
Sport Fishing	96.8	111.6	114.9	121.2	132.8	140.2	164.2	153.6	162.2	166.7	154.2	152.7	141.2	138.8	140.6	147.4	138.6	147.8	144.6	134.6	150.8	162.1
Saltwater	52.9	66.1	69.7	74.4	82.7	86.8	95.2	88.9	93.0	93.6	84.9	82.7	76.2	75.5	75.6	79.2	73.5	80.1	78.9	76.6	84.1	88.9
Freshwater	43.8	45.6	45.3	47.0	50.3	53.6	69.0	64.7	69.2	73.1	69.3	70.0	65.0	63.3	65.0	68.1	65.1	67.6	65.7	58.0	66.7	73.2
Total, Fisheries & Aquaculture	220.2	246.1	256.3	283.2	322.7	358.6	381.9	387.0	411.6	434.1	413.7	400.9	365.1	340.9	329.8	326.3	322.7	335.3	349.9	324.9	329.8	341.3
All Industries in BC	25,079	26,224	27,464	29,906	32,795	36,690	40,010	41,377	43,406	45,343	47,312	49,383	51,179	53,035	54,173	56,263	60,270	61,496	63,193	65,310	68,265	72,593
Goods-producing Industries	7,090	7,447	7,396	8,210	9,177	10,245	10,722	10,542	10,918	11,266	11,874	12,352	12,787	13,163	12,850	13,422	14,126	13,872	13,865	14,041	14,716	15,664
Agriculture & related processing	584	628	649	717	810	748	725	718	782	778	796	872	862	854	907	939	999	1,010	1,049	1,085	1,125	1,163
Service-producing Industries	17,989	18,777	20,069	21,696	23,618	26,445	29,288	30,835	32,488	34,076	35,438	37,031	38,411	39,872	41,323	42,842	46,144	47,624	49,328	51,269	53,548	56,929

Source: BC Stats & Statistics Canada

* *Wages and salaries exclude the earnings of owner operators of unincorporated businesses.*
Many people who work in the commercial fishery are fish boat owners who receive unincorporated business income rather than wages and salaries.

** *Wage and salary estimates for aquaculture are from the Statistics Canada Survey of Aquaculture, and are only available from 1997 on.*
Wage and salary estimates for the aquaculture sector for the period prior to 1997 are BC Stats estimates and are somewhat less robust.

Table 4a: Wages and salaries
(annual % change)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery*	33.0	42.0	22.5	34.9	17.3	-11.5	-34.9	6.0	5.9	19.9	-26.5	-4.9	-17.0	-44.8	-12.5	11.2	21.5	0.0	-0.6	3.4	14.8
Aquaculture	-12.8	78.5	154.2	173.5	130.2	15.9	55.5	-3.7	11.8	-6.0	57.7	-10.7	-3.9	1.7	14.8	14.3	7.5	11.6	-14.6	4.9	-4.7
Fish Processing	6.8	0.2	12.2	11.6	10.4	1.3	12.4	8.2	6.9	-5.4	-7.6	-10.3	-9.8	-3.2	-9.2	-0.6	-1.2	9.6	-5.4	-10.0	0.2
Sport Fishing	15.2	3.0	5.5	9.6	5.6	17.1	-6.5	5.6	2.8	-7.5	-1.0	-7.5	-1.7	1.2	4.8	-5.9	6.6	-2.2	-6.9	12.0	7.5
Saltwater	24.9	5.6	6.7	11.2	4.9	9.7	-6.7	4.6	0.7	-9.3	-2.6	-7.9	-0.9	0.1	4.9	-7.3	9.1	-1.6	-2.8	9.8	5.7
Freshwater	3.9	-0.6	3.7	7.0	6.6	28.8	-6.2	7.0	5.6	-5.2	1.0	-7.1	-2.6	2.6	4.8	-4.4	3.8	-2.8	-11.8	15.0	9.8
Total, Fisheries & Aquaculture	11.8	4.1	10.5	14.0	11.1	6.5	1.3	6.4	5.5	-4.7	-3.1	-8.9	-6.6	-3.2	-1.1	-1.1	3.9	4.3	-7.1	1.5	3.5
All Industries in BC	4.6	4.7	8.9	9.7	11.9	9.0	3.4	4.9	4.5	4.3	4.4	3.6	3.6	2.1	3.9	7.1	2.0	2.8	3.4	4.5	6.3
Goods-producing Industries	5.0	-0.7	11.0	11.8	11.6	4.7	-1.7	3.6	3.2	5.4	4.0	3.4	3.1	-2.4	4.4	5.2	-1.8	-0.1	1.3	4.8	6.4
Agriculture & related processing	7.6	3.4	10.5	12.9	-7.7	-3.0	-1.0	9.0	-0.6	2.3	9.6	-1.2	-0.8	6.2	3.5	6.4	1.2	3.8	3.5	3.7	3.3
Service-producing Industries	4.4	6.9	8.1	8.9	12.0	10.8	5.3	5.4	4.9	4.0	4.5	3.7	3.8	3.6	3.7	7.7	3.2	3.6	3.9	4.4	6.3

Source: BC Stats & Statistics Canada

** Wages and salaries exclude the earnings of owner operators of unincorporated businesses.*
Many people who work in the commercial fishery are fish boat owners who receive unincorporated business income rather than wages and salaries.

*** Wage and salary estimates for aquaculture are from the Statistics Canada Survey of Aquaculture, and are only available from 1997 on.*
Wage and salary estimates for the aquaculture sector for the period prior to 1997 are BC Stats estimates and are somewhat less robust.

Table 5: Revenue
($million)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery																						
Salmon	145	247	266	212	312	256	263	172	192	201	256	86	99	110	54	26	50	37	57	49	53	33
Herring	44	63	46	107	96	76	81	58	80	83	90	94	100	67	37	49	50	46	48	45	34	31
Halibut	9	14	24	28	23	19	21	22	22	30	37	34	32	42	31	39	43	37	48	49	51	52
Groundfish	26	32	41	59	60	55	67	81	79	71	91	84	74	87	91	94	93	88	83	88	97	105
Geoducks & Clams	6	8	8	13	18	20	16	13	19	30	38	46	38	38	35	39	47	45	45	37	38	37
Other	10	11	13	20	22	25	28	30	41	45	57	70	79	76	60	67	85	105	77	102	120	104
Commercial Total	***241***	***375***	***399***	***440***	***531***	***451***	***476***	***377***	***413***	***461***	***589***	***414***	***422***	***418***	***308***	***313***	***367***	***359***	***359***	***370***	***394***	***362***
Aquaculture																						
Salmon	1	1	3	13	39	60	79	111	115	138	154	170	156	176	229	291	278	269	239	256	225	310
Shellfish	2	3	3	3	3	3	4	4	5	5	7	9	11	9	9	11	13	17	15	18	18	17
Other	0	0	1	0	1	0	1	1	0	0	0	0	0	1	0	0	0	1	1	1	2	2
Aquaculture Total	***3***	***4***	***6***	***16***	***42***	***63***	***83***	***115***	***120***	***144***	***161***	***180***	***167***	***195***	***238***	***301***	***292***	***287***	***305***	***275***	***242***	***330***
Fish Processing	***390***	***526***	***574***	***683***	***776***	***744***	***785***	***710***	***635***	***690***	***863***	***794***	***720***	*	***805***	***593***	***655***	***736***	***722***	***694***	***621***	***638***
Sport Fishing																						
Saltwater	204	240	256	284	307	329	345	337	332	354	349	350	337	335	337	320	341	372	374	384	465	467
Freshwater	149	166	176	195	211	230	255	258	257	289	303	310	300	293	303	291	318	326	325	306	385	398
Sport Fishing Total	***353***	***406***	***431***	***479***	***519***	***559***	***600***	***595***	***589***	***643***	***651***	***660***	***637***	***628***	***640***	***611***	***659***	***698***	***699***	***691***	***850***	***865***
Total, Fisheries & Aquaculture	***987***	***1,311***	***1,411***	***1,618***	***1,868***	***1,818***	***1,944***	***1,797***	***1,757***	***1,937***	***2,244***	***2,048***	***1,947***	*	***1,691***	***1,818***	***1,973***	***2,079***	***2,084***	***2,029***	***2,107***	***2,203***

Sources: Ministry of Environment, Fisheries & Oceans Canada, BC Stats and Statistics Canada

Revenue for the commercial fishery and aquaculture industries is measured by landed value.

** Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement.*

Table 5a: Revenue
(annual % change)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Commercial Fishery																					
Salmon	70.4	7.7	-20.2	47.2	-17.9	2.9	-34.5	11.2	4.8	27.5	-66.5	15.6	10.6	-50.8	-51.3	91.7	-26.3	54.3	-14.8	8.6	-37.9
Herring	42.2	-26.6	131.9	-10.2	-20.9	6.8	-28.5	3.5	37.7	8.7	4.0	6.2	-32.9	-45.3	32.8	3.1	-7.8	4.8	-6.8	-24.6	-8.5
Halibut	46.3	76.6	16.4	-18.0	-19.5	12.7	3.4	-1.1	40.7	23.7	-8.9	-5.1	28.6	-26.1	25.8	9.8	-12.5	29.0	2.5	4.5	1.2
Groundfish	23.6	28.4	42.0	1.5	-7.3	20.3	21.6	-3.0	-9.2	27.6	-7.5	-12.1	17.0	5.1	3.0	-1.2	-4.8	-5.4	5.6	10.5	7.7
Geoducks & Clams	38.5	3.2	62.3	34.7	9.9	-18.2	-18.1	44.6	57.1	26.0	22.4	-16.2	-2.3	-6.6	11.1	19.2	-2.6	-1.5	-16.4	1.6	-3.4
Other	8.3	18.7	48.4	8.0	14.8	11.8	9.1	37.1	9.3	25.6	23.6	12.0	-3.2	-20.7	10.5	27.3	23.3	-26.4	31.6	18.6	-13.4
Commercial Total	***55.7***	***6.5***	***10.1***	***20.7***	***-15.1***	***5.6***	***-20.9***	***9.5***	***11.7***	***23.6***	***-27.3***	***2.0***	***-0.9***	***-26.5***	***1.7***	***17.3***	***-2.3***	***0.0***	***3.1***	***6.5***	***-8.2***
Aquaculture																					
Salmon	16.8	232.7	371.8	203.6	52.8	31.6	41.0	4.1	19.7	11.3	10.8	-8.5	13.0	30.0	26.9	-4.2	-3.2	7.3	-11.5	-12.0	41.5
Shellfish	24.1	-3.4	2.5	7.4	9.0	23.7	7.1	14.4	14.4	25.8	42.8	15.9	-20.7	3.7	16.7	25.7	26.5	-9.0	17.8	-13.4	12.3
Other	0.5	30.8	-22.3	14.3	-25.9	43.3	0.4	-39.8	-20.7	46.3	14.4	-9.1	52.4	-41.8	7.2	-26.1	81.8	40.0	42.9	60.0	43.8
Aquaculture Total	***19.4***	***50.5***	***173.0***	***166.4***	***49.0***	***31.3***	***39.2***	***4.2***	***19.3***	***11.9***	***12.1***	***-7.2***	***10.9***	***28.5***	***26.5***	***-3.2***	***-1.8***	***6.4***	***-9.9***	***-11.8***	***39.7***
Fish Processing	***35.0***	***9.2***	***18.9***	***13.6***	***-4.1***	***5.4***	***-9.5***	***-10.6***	***8.7***	***25.1***	***-8.0***	***-9.3***	*	*	***17.3***	***10.4***	***12.3***	***-1.9***	***-3.9***	***-10.5***	***2.8***
Sport Fishing																					
Saltwater	17.8	6.4	11.0	8.2	7.2	4.9	-2.3	-1.5	6.4	-1.4	0.3	-3.7	-0.6	0.7	-5.1	6.7	9.0	0.6	2.6	21.0	0.5
Freshwater	11.1	6.0	11.0	8.5	8.9	10.7	1.3	-0.5	12.5	4.7	2.6	-3.2	-2.5	3.5	-3.9	9.1	2.5	-0.3	-5.7	25.8	3.1
Sport Fishing Total	***15.0***	***6.2***	***11.0***	***8.3***	***7.9***	***7.2***	***-0.8***	***-1.1***	***9.1***	***1.3***	***1.3***	***-3.5***	***-1.5***	***2.0***	***-4.5***	***7.9***	***5.9***	***0.2***	***-1.2***	***23.1***	***1.7***
Total, Fisheries & Aquaculture	***32.9***	***7.6***	***14.6***	***15.5***	***-2.7***	***6.9***	***-7.5***	***-2.3***	***10.3***	***15.9***	***-8.7***	***-4.9***	*	*	***7.5***	***8.5***	***5.4***	***0.3***	***-2.7***	***3.9***	***4.5***

Sources: Ministry of Environment, Fisheries & Oceans Canada, BC Stats and Statistics Canada

Revenue for the commercial fishery and aquaculture industries is measured by landed value.

** Data for the fish processing industry in 1997 has been deemed confidential by Statistics Canada and cannot be published. All data tabulations produced by Statistics Canada are checked to ensure that "no data that could identify an individual, business or organization, are published without the knowledge or consent of the individual, business or organization". In the case of BC's fish processing industry, Statistics Canada has determined that publishing the 1997 data would not satisfy this requirement.*

Table 6: Exports of BC fish and seafood products ($million)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total, Wild Finfish & Shellfish	***699.0***	***735.6***	***753.6***	***661.4***	***623.8***	***677.8***	***751.7***	***660.1***	***683.5***	***607.9***	***559.1***	***584.5***	***663.0***	***599.1***	***618.7***	***659.9***	***729.4***	***675.7***
Wild Finfish	***644.5***	***684.2***	***698.5***	***602.5***	***543.4***	***584.0***	***632.7***	***511.1***	***533.3***	***459.5***	***436.8***	***465.3***	***521.6***	***455.8***	***498.6***	***504.4***	***548.3***	***510.2***
Wild Salmon	*389.7*	*453.8*	*456.0*	*365.4*	*311.8*	*298.9*	*349.0*	*187.5*	*190.6*	*189.6*	*143.4*	*103.7*	*117.0*	*134.3*	*151.2*	*155.1*	*177.6*	*153.6*
Herring	*155.4*	*148.1*	*156.3*	*129.1*	*120.1*	*153.2*	*130.7*	*157.5*	*199.9*	*106.8*	*104.9*	*99.7*	*132.1*	*104.6*	*97.9*	*91.1*	*93.5*	*94.1*
Halibut	*19.6*	*10.1*	*15.3*	*20.9*	*23.3*	*32.2*	*40.3*	*35.8*	*33.6*	*38.3*	*50.2*	*80.8*	*78.0*	*75.8*	*93.1*	*98.3*	*80.2*	*49.5*
Other	*79.8*	*72.2*	*70.9*	*87.0*	*88.3*	*99.7*	*112.6*	*130.4*	*109.3*	*124.7*	*138.3*	*181.1*	*194.5*	*141.1*	*156.3*	*159.9*	*197.0*	*213.0*
Shellfish*	***54.5***	***51.4***	***55.1***	***58.9***	***80.4***	***93.9***	***119.1***	***148.9***	***150.3***	***148.4***	***122.3***	***119.2***	***141.3***	***143.3***	***120.1***	***155.6***	***181.1***	***165.4***
Geoducks & Clams	*22.4*	*24.2*	*15.1*	*13.4*	*19.4*	*29.2*	*42.3*	*58.7*	*47.0*	*51.5*	*51.0*	*59.0*	*55.1*	*51.6*	*49.6*	*51.9*	*54.7*	*48.4*
Shrimp & Prawns	*6.6*	*3.8*	*6.0*	*7.6*	*7.2*	*10.0*	*12.0*	*26.1*	*33.0*	*32.6*	*26.0*	*19.5*	*38.5*	*31.0*	*21.3*	*40.1*	*36.4*	*49.8*
Crabs	*6.3*	*2.6*	*6.9*	*6.1*	*10.3*	*23.1*	*25.8*	*25.0*	*38.7*	*33.3*	*19.6*	*23.4*	*26.9*	*42.8*	*31.0*	*44.4*	*62.6*	*40.3*
Other Shellfish	*19.1*	*20.8*	*27.1*	*31.8*	*43.4*	*31.5*	*38.9*	*39.1*	*31.6*	*31.0*	*25.7*	*17.3*	*20.8*	*17.9*	*18.2*	*19.2*	*27.5*	*26.9*
Farmed Finfish & Shellfish*	***2.7***	***10.0***	***14.4***	***34.6***	***95.6***	***114.9***	***144.5***	***179.8***	***153.7***	***212.8***	***245.8***	***260.5***	***232.5***	***366.2***	***395.4***	***320.6***	***244.9***	***309.5***
Farmed Salmon	*0.9*	*9.1*	*12.7*	*32.7*	*93.7*	*112.2*	*140.7*	*175.4*	*149.4*	*208.3*	*241.5*	*255.4*	*227.5*	*361.1*	*389.8*	*313.2*	*239.4*	*302.4*
Farmed Shellfish	*1.8*	*0.9*	*1.7*	*1.9*	*1.9*	*2.7*	*3.8*	*4.5*	*4.3*	*4.2*	*3.1*	*4.6*	*4.8*	*4.9*	*5.6*	*7.4*	*5.5*	*7.0*
Other Fish & Seafood Products	***0.1***	***0.0***	***0.0***	***0.0***	***0.0***	***0.1***	***0.2***	***0.0***	***0.1***	***0.1***	***0.1***	***0.0***	***0.1***	***0.1***	***0.0***	***0.4***	***0.2***	***0.0***
Total	***701.8***	***745.6***	***768.0***	***696.0***	***719.5***	***792.8***	***896.5***	***839.9***	***837.3***	***820.8***	***805.1***	***845.0***	***895.6***	***965.4***	***1014.1***	***981.0***	***974.5***	***985.2***
Other Products**	***10.0***	***12.4***	***8.5***	***7.4***	***8.7***	***9.9***	***14.5***	***8.4***	***8.0***	***8.8***	***8.8***	***8.5***	***8.6***	***9.1***	***15.8***	***15.8***	***10.1***	***10.4***
Total Fish & Seafood Products	***711.8***	***758.0***	***776.5***	***703.4***	***728.2***	***802.6***	***911.0***	***848.3***	***845.3***	***829.6***	***813.9***	***853.5***	***904.1***	***974.5***	***1029.9***	***996.8***	***984.6***	***995.6***
Fishing Vessels & Factory Ships	1.7	0.3	1.2	1.4	1.1	1.7	1.7	2.9	3.0	4.1	3.5	4.5	6.4	8.1	9.6	8.8	10.4	10.6
Pleasure Boats & Motors	29.2	16.6	19.9	17.5	13.4	20.5	31.4	34.2	56.9	49.8	93.3	109.5	85.6	172.7	177.0	154.7	97.6	97.4
Fishing Lines, Nets, etc	0.1	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.0	0.0	0.0

Source: BC Stats

* *Totals may include some farmed products which are not separately identified*

** *Total includes farmed trout as well as salmon and shellfish. Although farmed salmon was not a separate export category prior to 1991, it was assumed that all exports of fresh Atlantic salmon were farmed.*

*** *Includes fish meal and similar products*

Table 6a: Exports of BC fish and seafood products (annual % change)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total, Wild Finfish & Shellfish	***5.2***	***2.5***	***-12.2***	***-5.7***	***8.7***	***10.9***	***-12.2***	***3.6***	***-11.1***	***-8.0***	***4.5***	***13.4***	***-9.6***	***3.3***	***6.7***	***10.5***	***-7.4***
Wild Finfish	***6.2***	***2.1***	***-13.7***	***-9.8***	***7.5***	***8.3***	***-19.2***	***4.3***	***-13.8***	***-4.9***	***6.5***	***12.1***	***-12.6***	***9.4***	***1.2***	***8.7***	***-6.9***
Wild Salmon	*16.4*	*0.5*	*-19.9*	*-14.7*	*-4.1*	*16.8*	*-46.3*	*1.6*	*-0.5*	*-24.4*	*-27.7*	*12.8*	*14.8*	*12.6*	*2.6*	*14.5*	*-13.5*
Herring	*-4.7*	*5.5*	*-17.4*	*-7.0*	*27.6*	*-14.7*	*20.5*	*26.9*	*-46.6*	*-1.8*	*-5.0*	*32.5*	*-20.8*	*-6.4*	*-7.0*	*2.6*	*0.7*
Halibut	*-48.6*	*52.0*	*36.4*	*11.0*	*38.4*	*25.3*	*-11.2*	*-6.2*	*14.2*	*30.9*	*61.1*	*-3.5*	*-2.9*	*22.8*	*5.6*	*-18.4*	*-38.3*
Other	*-9.5*	*-1.8*	*22.8*	*1.4*	*12.9*	*13.0*	*15.8*	*-16.2*	*14.2*	*10.9*	*30.9*	*7.4*	*-27.5*	*10.8*	*2.3*	*23.2*	*8.1*
Shellfish*	***-5.7***	***7.1***	***6.9***	***36.5***	***16.8***	***26.9***	***25.1***	***0.9***	***-1.3***	***-17.5***	***-2.6***	***18.6***	***1.4***	***-16.2***	***29.5***	***16.4***	***-8.7***
Geoducks & Clams	*7.8*	*-37.5*	*-11.4*	*44.7*	*50.8*	*44.8*	*38.7*	*-20.0*	*9.6*	*-0.9*	*15.5*	*-6.5*	*-6.4*	*-3.9*	*4.7*	*5.4*	*-11.5*
Shrimp & Prawns	*-42.4*	*55.5*	*28.0*	*-5.3*	*38.6*	*20.0*	*117.3*	*26.4*	*-1.2*	*-20.4*	*-24.8*	*97.0*	*-19.5*	*-31.0*	*87.7*	*-9.2*	*36.9*
Crabs	*-58.8*	*165.5*	*-12.1*	*69.9*	*123.3*	*11.8*	*-3.3*	*54.9*	*-14.0*	*-41.0*	*19.4*	*14.9*	*59.0*	*-27.6*	*43.4*	*40.8*	*-35.6*
Other Shellfish	*8.8*	*30.3*	*17.3*	*36.7*	*-27.4*	*23.4*	*0.6*	*-19.2*	*-2.0*	*-17.0*	*-32.8*	*20.5*	*-13.9*	*1.4*	*5.4*	*43.4*	*-2.0*
Farmed Finfish & Shellfish*	***272.4***	***43.9***	***140.4***	***176.0***	***20.1***	***25.8***	***24.5***	***-14.5***	***38.4***	***15.5***	***6.0***	***-10.7***	***57.5***	***8.0***	***-18.9***	***-23.6***	***26.4***
Farmed Salmon	*931.3*	*38.5*	*157.9*	*186.7*	*19.7*	*25.4*	*24.6*	*-14.8*	*39.4*	*15.9*	*5.8*	*-11.0*	*58.8*	*7.9*	*-19.6*	*-23.6*	*26.3*
Farmed Shellfish	*-52.0*	*101.7*	*11.2*	*-1.9*	*42.1*	*39.8*	*18.0*	*-4.2*	*-1.8*	*-26.0*	*46.9*	*5.8*	*2.6*	*13.7*	*32.1*	*-26.2*	*28.2*
Other Fish & Seafood Products Total	***6.2***	***3.0***	***-9.4***	***3.4***	***10.2***	***13.1***	***-6.3***	***-0.3***	***-2.0***	***-1.9***	***5.0***	***6.0***	***7.8***	***5.0***	***-3.3***	***-0.7***	***1.1***
Other Products**	***23.7***	***-31.2***	***-13.7***	***18.0***	***13.4***	***47.3***	***-42.4***	***-4.2***	***9.7***	***0.2***	***-3.8***	***1.0***	***6.2***	***73.7***	***0.3***	***-36.3***	***2.9***
Total Fish & Seafood Products	***6.5***	***2.4***	***-9.4***	***3.5***	***10.2***	***13.5***	***-6.9***	***-0.3***	***-1.9***	***-1.9***	***4.9***	***5.9***	***7.8***	***5.7***	***-3.2***	***-1.2***	***1.1***
Fishing Vessels & Factory Ships	-85.5	382.2	14.0	-20.9	54.5	-0.5	75.2	1.1	37.4	-13.4	27.0	42.8	26.6	18.4	-8.6	18.8	1.3
Pleasure Boats & Motors	-43.2	20.2	-12.2	-23.6	53.6	52.9	8.9	66.5	-12.4	87.1	17.4	-21.8	101.7	2.5	-12.6	-36.9	-0.2
Fishing Lines, Nets, etc	-	-	135.9	-81.3	-94.6	760.8	7.7	-	-	-	-7.8	60.0	-17.3	17.0	-91.5	-	-

Source: BC Stats

* *Totals may include some farmed products which are not separately identified*

** *Total includes farmed trout as well as salmon and shellfish. Although farmed salmon was not a separate export category prior to 1991, it was assumed that all exports of fresh Atlantic salmon were farmed.*

*** *Includes fish meal and similar products*

Table 7: Exports of BC fish and seafood products by level of processing ($million)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fresh	***115.9***	***154.5***	***175.6***	***210.4***	***238.1***	***292.2***	***349.4***	***391.4***	***342.5***	***413.7***	***462.1***	***520.2***	***511.2***	***597.8***	***646.6***	***589.8***	***533.3***	***544.8***
Wild Salmon	*38.9*	*71.3*	*88.1*	*89.3*	*26.3*	*35.1*	*29.1*	*15.1*	*10.9*	*13.7*	*10.5*	*7.8*	*5.7*	*12.6*	*26.1*	*30.9*	*35.6*	*31.0*
Farmed Salmon	*0.9*	*8.7*	*11.5*	*31.6*	*93.1*	*111.6*	*140.6*	*175.3*	*149.4*	*208.2*	*241.1*	*255.3*	*227.0*	*360.4*	*385.0*	*311.4*	*236.4*	*302.0*
Halibut	*14.0*	*4.6*	*11.7*	*17.6*	*21.0*	*31.6*	*39.3*	*33.9*	*32.5*	*37.0*	*46.9*	*72.4*	*67.7*	*67.0*	*85.1*	*87.6*	*71.1*	*47.2*
Herring	*0.5*	*0.4*	*1.5*	*0.1*	*1.3*	*2.3*	*1.6*	*1.1*	*0.6*	*2.5*	*2.5*	*3.2*	*4.1*	*0.0*	*0.3*	*0.1*	*0.5*	*1.2*
Other Finfish	*31.1*	*39.4*	*33.6*	*36.3*	*39.5*	*43.1*	*44.4*	*52.4*	*47.1*	*54.7*	*75.3*	*93.0*	*118.9*	*58.6*	*65.0*	*60.0*	*68.8*	*64.1*
Shellfish	*30.5*	*30.0*	*29.2*	*35.7*	*56.9*	*68.5*	*94.4*	*113.7*	*102.0*	*97.6*	*85.8*	*88.5*	*87.8*	*99.2*	*85.1*	*99.8*	*120.9*	*99.3*
Frozen	***258.5***	***255.9***	***243.8***	***210.0***	***212.8***	***226.3***	***295.6***	***200.0***	***172.9***	***212.0***	***153.9***	***149.2***	***166.0***	***168.9***	***186.7***	***224.4***	***281.8***	***285.2***
Salmon	*203.5*	*212.4*	*196.4*	*150.1*	*157.2*	*168.1*	*213.8*	*99.1*	*70.1*	*99.2*	*54.3*	*36.3*	*42.9*	*45.1*	*67.5*	*66.8*	*91.6*	*72.1*
Other Finfish	*47.0*	*35.0*	*39.5*	*53.0*	*47.6*	*49.6*	*66.6*	*76.2*	*61.6*	*72.7*	*74.1*	*91.2*	*82.8*	*91.9*	*96.4*	*110.0*	*142.8*	*157.4*
Shellfish	*8.0*	*8.5*	*7.8*	*6.9*	*8.0*	*8.5*	*15.2*	*24.7*	*41.2*	*40.1*	*25.5*	*21.7*	*40.3*	*31.9*	*22.8*	*47.6*	*47.4*	*55.7*
Processed	***314.7***	***325.7***	***341.3***	***270.1***	***263.2***	***268.9***	***245.6***	***240.1***	***316.2***	***189.6***	***184.0***	***170.1***	***210.9***	***189.5***	***172.1***	***155.8***	***150.3***	***145.4***
Salmon	*147.3*	*170.5*	*172.6*	*127.2*	*128.9*	*96.2*	*106.3*	*73.3*	*109.7*	*76.8*	*79.0*	*59.7*	*68.8*	*77.3*	*62.4*	*59.2*	*53.3*	*51.0*
Herring	*151.3*	*147.1*	*153.1*	*127.0*	*116.3*	*148.3*	*125.6*	*151.2*	*193.5*	*95.5*	*86.6*	*91.1*	*122.9*	*96.4*	*90.4*	*80.8*	*83.2*	*81.1*
Other Finfish	*10.8*	*3.7*	*3.1*	*3.1*	*6.0*	*10.2*	*6.3*	*7.2*	*7.1*	*7.7*	*9.3*	*11.2*	*8.1*	*6.5*	*9.5*	*10.3*	*2.9*	*3.9*
Shellfish	*5.3*	*4.4*	*12.5*	*12.9*	*12.1*	*14.2*	*7.5*	*8.4*	*5.9*	*9.6*	*9.1*	*8.1*	*11.1*	*9.4*	*9.8*	*5.5*	*10.9*	*9.3*
Other Finfish & Shellfish n.e.s.	***12.7***	***9.5***	***7.3***	***5.4***	***5.4***	***5.4***	***5.8***	***8.4***	***5.7***	***5.5***	***5.0***	***5.5***	***7.5***	***9.2***	***8.6***	***10.9***	***9.0***	***9.8***
Total	***701.8***	***745.6***	***768.0***	***696.0***	***719.5***	***792.8***	***896.5***	***839.9***	***837.3***	***820.8***	***805.1***	***845.0***	***895.6***	***965.4***	***1014.1***	***981.0***	***974.5***	***985.2***
Other Products*	***10.0***	***12.4***	***8.5***	***7.4***	***8.7***	***9.9***	***14.5***	***8.4***	***8.0***	***8.8***	***8.8***	***8.5***	***8.6***	***9.1***	***15.8***	***15.8***	***10.1***	***10.4***
Total, Fish & Seafood Products	***711.8***	***758.0***	***776.5***	***703.4***	***728.2***	***802.6***	***911.0***	***848.3***	***845.3***	***829.6***	***813.9***	***853.5***	***904.1***	***974.5***	***1029.9***	***996.8***	***984.6***	***995.6***

Source: BC Stats

** Includes fish meal and similar products*

Table 7a: Exports of BC fish and seafood products by level of processing (annual % change)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fresh	***33.3***	***13.7***	***19.8***	***13.1***	***22.8***	***19.6***	***12.0***	***-12.5***	***20.8***	***11.7***	***12.6***	***-1.7***	***16.9***	***8.2***	***-8.8***	***-9.6***	***2.2***
Wild Salmon	*83.0*	*23.6*	*1.3*	*-70.5*	*33.4*	*-17.1*	*-48.0*	*-28.2*	*25.8*	*-23.1*	*-25.9*	*-26.4*	*120.1*	*107.2*	*18.1*	*15.5*	*-13.2*
Farmed Salmon	*888.9*	*32.3*	*173.3*	*195.1*	*19.9*	*25.9*	*24.7*	*-14.8*	*39.4*	*15.8*	*5.9*	*-11.1*	*58.8*	*6.8*	*-19.1*	*-24.1*	*27.8*
Halibut	*-67.1*	*154.0*	*50.2*	*19.3*	*50.5*	*24.5*	*-13.7*	*-4.1*	*13.6*	*26.9*	*54.4*	*-6.5*	*-1.1*	*27.1*	*2.9*	*-18.8*	*-33.6*
Herring	*-20.1*	*247.1*	*-93.9*	*1369.1*	*79.5*	*-31.8*	*-31.9*	*-41.0*	*285.3*	*2.8*	*28.3*	*26.7*	*-*	*-*	*-58.2*	*350.3*	*157.9*
Other Finfish	*26.7*	*-14.7*	*7.8*	*8.8*	*9.3*	*3.0*	*17.9*	*-10.1*	*16.3*	*37.5*	*23.5*	*27.9*	*-50.7*	*11.0*	*-7.6*	*14.5*	*-6.7*
Shellfish	*-1.5*	*-2.7*	*22.2*	*59.6*	*20.4*	*37.9*	*20.3*	*-10.2*	*-4.3*	*-12.0*	*3.1*	*-0.9*	*13.0*	*-14.2*	*17.2*	*21.2*	*-17.9*
Frozen	***-1.0***	***-4.7***	***-13.8***	***1.3***	***6.3***	***30.6***	***-32.4***	***-13.6***	***22.7***	***-27.4***	***-3.1***	***11.3***	***1.8***	***10.6***	***20.2***	***25.6***	***1.2***
Salmon	*4.4*	*-7.5*	*-23.6*	*4.7*	*7.0*	*27.2*	*-53.6*	*-29.3*	*41.6*	*-45.3*	*-33.1*	*18.2*	*5.0*	*49.7*	*-1.0*	*37.2*	*-21.3*
Other Finfish	*-25.5*	*13.0*	*34.0*	*-10.1*	*4.2*	*34.2*	*14.3*	*-19.1*	*18.1*	*1.8*	*23.1*	*-9.2*	*11.0*	*4.9*	*14.1*	*29.7*	*10.2*
Processed	***3.5***	***4.8***	***-20.8***	***-2.6***	***2.1***	***-8.6***	***-2.3***	***31.7***	***-40.0***	***-3.0***	***-7.6***	***24.0***	***-10.1***	***-9.2***	***-9.5***	***-3.5***	***-3.3***
Salmon	*15.8*	*1.2*	*-26.3*	*1.4*	*-25.3*	*10.4*	*-31.0*	*49.6*	*-30.0*	*2.9*	*-24.4*	*15.2*	*12.3*	*-19.3*	*-5.1*	*-9.9*	*-4.5*
Herring	*-2.7*	*4.1*	*-17.0*	*-8.4*	*27.5*	*-15.3*	*20.4*	*28.0*	*-50.7*	*-9.3*	*5.2*	*34.9*	*-21.6*	*-6.2*	*-10.6*	*3.0*	*-2.5*
Other Finfish	*-65.7*	*-17.0*	*0.9*	*92.7*	*69.5*	*-38.4*	*15.0*	*-1.5*	*8.2*	*21.8*	*19.5*	*-27.4*	*-20.4*	*47.3*	*7.8*	*-71.4*	*34.4*
Shellfish	*-18.1*	*187.0*	*2.8*	*-6.4*	*17.6*	*-47.1*	*11.5*	*-29.4*	*63.2*	*-6.0*	*-10.7*	*36.7*	*-15.3*	*4.9*	*-43.7*	*96.3*	*-14.4*
Other Finfish & Shellfish n.e.s.	***-24.6***	***-23.5***	***-25.9***	***-0.7***	***0.2***	***8.5***	***44.4***	***-32.0***	***-4.2***	***-8.9***	***10.7***	***36.0***	***22.4***	***-6.2***	***26.1***	***-17.1***	***8.2***
Total	***6.2***	***3.0***	***-9.4***	***3.4***	***10.2***	***13.1***	***-6.3***	***-0.3***	***-2.0***	***-1.9***	***5.0***	***6.0***	***7.8***	***5.0***	***-3.3***	***-0.7***	***1.1***
Other Products*	***23.7***	***-31.2***	***-13.7***	***18.0***	***13.4***	***47.3***	***-42.4***	***-4.2***	***9.7***	***0.2***	***-3.8***	***1.0***	***6.2***	***73.7***	***0.3***	***-36.3***	***2.9***
Total, Fish & Seafood Products	***6.5***	***2.4***	***-9.4***	***3.5***	***10.2***	***13.5***	***-6.9***	***-0.3***	***-1.9***	***-1.9***	***4.9***	***5.9***	***7.8***	***5.7***	***-3.2***	***-1.2***	***1.1***

Source: BC Stats

** Includes fish meal and similar products*

Table 8: Imports of fish and seafood products consumed in BC ($million)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fresh	***8.9***	***9.5***	***10.1***	***11.1***	***11.4***	***14.5***	***23.8***	***58.1***	***36.6***	***39.0***	***49.7***	***99.4***	***119.7***	***110.7***	***115.6***	***109.5***	***105.1***	***109.4***
Salmon	*1.0*	*1.4*	*1.0*	*0.9*	*0.9*	*2.0*	*2.0*	*18.5*	*4.4*	*3.3*	*8.0*	*19.6*	*21.7*	*19.3*	*14.3*	*19.2*	*20.3*	*20.9*
Other Finfish	*3.7*	*3.8*	*5.1*	*5.7*	*5.3*	*4.6*	*5.3*	*19.3*	*6.4*	*5.8*	*11.9*	*24.3*	*28.1*	*30.3*	*32.5*	*29.1*	*27.8*	*27.9*
Shellfish	*4.2*	*4.2*	*4.1*	*4.6*	*5.3*	*7.9*	*16.4*	*20.4*	*25.8*	*29.9*	*29.9*	*55.4*	*69.8*	*61.1*	*68.8*	*61.1*	*56.9*	*60.6*
Frozen	***49.3***	***53.8***	***51.0***	***54.8***	***59.6***	***92.7***	***122.4***	***132.3***	***167.0***	***132.0***	***155.4***	***204.2***	***253.3***	***230.8***	***203.4***	***186.5***	***189.5***	***186.5***
Salmon	*4.4*	*5.0*	*3.8*	*3.9*	*4.3*	*5.8*	*5.2*	*7.9*	*7.9*	*5.2*	*4.3*	*9.8*	*10.7*	*7.7*	*8.0*	*12.7*	*13.9*	*13.5*
Other Finfish	*21.0*	*24.3*	*22.2*	*24.7*	*28.8*	*44.9*	*66.7*	*66.2*	*72.3*	*55.6*	*59.3*	*73.9*	*81.1*	*74.4*	*85.7*	*83.8*	*80.0*	*77.2*
Shellfish	*23.9*	*24.5*	*24.9*	*26.2*	*26.5*	*41.9*	*50.5*	*58.2*	*86.9*	*71.2*	*91.7*	*120.5*	*161.4*	*148.7*	*109.7*	*90.0*	*95.6*	*95.8*
Processed	***27.5***	***29.1***	***23.3***	***24.6***	***26.6***	***45.8***	***60.7***	***76.3***	***73.0***	***63.9***	***84.0***	***101.0***	***116.8***	***110.1***	***107.8***	***105.8***	***109.3***	***113.0***
Salmon	*1.2*	*1.6*	*2.0*	*1.3*	*1.6*	*6.7*	*9.9*	*12.8*	*11.4*	*7.6*	*13.0*	*19.6*	*22.6*	*19.9*	*16.2*	*17.6*	*18.2*	*17.4*
Other Finfish	*15.6*	*18.7*	*12.5*	*14.1*	*13.8*	*22.7*	*29.9*	*40.7*	*39.8*	*37.0*	*46.5*	*51.6*	*60.6*	*58.0*	*58.4*	*51.3*	*52.4*	*55.4*
Shellfish	*10.7*	*8.8*	*8.8*	*9.3*	*11.3*	*16.3*	*20.9*	*22.8*	*21.9*	*19.4*	*24.5*	*29.9*	*33.6*	*32.3*	*33.2*	*36.9*	*38.7*	*40.2*
Other Finfish & Shellfish n.e.s.	***0.1***	***0.1***	***0.1***	***0.1***	***0.1***	***0.0***	***1.0***	***0.2***	***0.1***	***0.6***	***1.7***	***1.9***	***1.6***	***1.4***	***1.0***	***1.0***	***0.9***	***0.9***
Total	***85.9***	***92.5***	***84.5***	***90.7***	***97.8***	***153.0***	***207.9***	***266.9***	***276.7***	***235.5***	***290.7***	***406.5***	***491.5***	***453.0***	***427.8***	***402.8***	***404.8***	***409.9***
Other Products*	***1.9***	***2.4***	***2.6***	***2.4***	***3.8***	***5.6***	***8.8***	***11.7***	***15.4***	***16.9***	***19.9***	***17.7***	***25.5***	***28.2***	***26.2***	***23.1***	***22.8***	***21.7***
Total	***87.8***	***94.9***	***87.1***	***93.1***	***101.6***	***158.6***	***216.7***	***278.6***	***292.2***	***252.4***	***310.6***	***424.2***	***517.0***	***481.2***	***454.0***	***425.9***	***427.6***	***431.6***

Source: BC Stats
Imports have been adjusted to include only those consumed in the province
*** Includes fish meal and similar products*

Table 8a: Imports of fish and seafood products consumed in BC (annual % change)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fresh	***6.4***	***6.7***	***10.4***	***2.8***	***26.6***	***64.0***	***144.6***	***-37.0***	***6.4***	***27.7***	***99.8***	***20.4***	***-7.5***	***4.4***	***-5.3***	***-4.0***	***4.2***
Salmon	*50.4*	*-32.9*	*-9.5*	*-1.0*	*125.7*	*3.8*	*809.9*	*-76.1*	*-26.5*	*146.5*	*144.8*	*10.8*	*-11.4*	*-26.0*	*34.9*	*5.9*	*2.9*
Other Finfish	*2.5*	*31.9*	*12.7*	*-7.8*	*-11.8*	*15.2*	*262.3*	*-66.7*	*-9.6*	*104.2*	*105.1*	*15.6*	*7.7*	*7.3*	*-10.4*	*-4.5*	*0.2*
Shellfish	*-0.2*	*-2.8*	*12.3*	*16.7*	*48.4*	*107.6*	*24.0*	*26.6*	*16.1*	*-0.1*	*85.6*	*26.0*	*-12.4*	*12.5*	*-11.1*	*-6.9*	*6.5*
Frozen	***9.2***	***-5.3***	***7.4***	***8.8***	***55.5***	***32.1***	***8.0***	***26.2***	***-20.9***	***17.6***	***31.4***	***24.1***	***-8.9***	***-11.9***	***-8.3***	***1.6***	***-1.6***
Salmon	*13.3*	*-23.4*	*1.6*	*9.3*	*37.6*	*-10.5*	*50.8*	*-0.5*	*-33.2*	*-17.7*	*126.8*	*9.7*	*-28.4*	*4.5*	*58.2*	*9.5*	*-3.1*
Other Finfish	*16.0*	*-8.7*	*11.0*	*16.8*	*56.0*	*48.4*	*-0.8*	*9.2*	*-23.1*	*6.7*	*24.6*	*9.8*	*-8.4*	*15.2*	*-2.2*	*-4.6*	*-3.5*
Processed	***5.7***	***-20.1***	***5.9***	***8.0***	***72.0***	***32.6***	***25.8***	***-4.3***	***-12.5***	***31.4***	***20.3***	***15.6***	***-5.7***	***-2.1***	***-1.9***	***3.3***	***3.4***
Salmon	*35.2*	*21.0*	*-34.5*	*21.1*	*331.0*	*47.7*	*29.1*	*-11.3*	*-33.6*	*72.3*	*50.4*	*15.5*	*-12.2*	*-18.1*	*8.3*	*3.4*	*-4.3*
Other Finfish	*19.6*	*-32.9*	*12.5*	*-2.3*	*65.1*	*31.5*	*36.2*	*-2.3*	*-7.1*	*25.8*	*10.9*	*17.5*	*-4.3*	*0.7*	*-12.2*	*2.1*	*5.9*
Shellfish	*-17.8*	*-0.4*	*5.4*	*21.9*	*44.6*	*27.8*	*9.2*	*-4.0*	*-11.3*	*26.3*	*22.1*	*12.4*	*-3.9*	*2.8*	*11.2*	*4.9*	*3.8*
Other Finfish & Shellfish n.e.s.	***9.5***	***-3.1***	***-12.3***	***25.7***	***-67.8***	***1931.2***	***-79.1***	***-42.4***	***405.4***	***182.0***	***16.5***	***-15.7***	***-15.6***	***-23.3***	***-5.3***	***-7.2***	***0.0***
Total	***7.8***	***-8.7***	***7.3***	***7.9***	***56.5***	***35.8***	***28.4***	***3.7***	***-14.9***	***23.5***	***39.8***	***20.9***	***-7.8***	***-5.6***	***-5.8***	***0.5***	***1.3***
Other Products*	***24.0***	***6.8***	***-6.7***	***57.3***	***48.8***	***56.8***	***32.4***	***32.5***	***9.5***	***17.5***	***-11.0***	***44.5***	***10.4***	***-7.2***	***-11.9***	***-1.0***	***-4.9***
Total	***8.1***	***-8.3***	***6.9***	***9.1***	***56.2***	***36.6***	***28.6***	***4.9***	***-13.6***	***23.0***	***36.6***	***21.9***	***-6.9***	***-5.7***	***-6.2***	***0.4***	***0.9***

Source: BC Stats

Table 9: BC's trade in fish and seafood products, by country ($million)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Exports	***711.8***	***758.0***	***776.5***	***703.4***	***728.2***	***802.6***	***911.0***	***848.3***	***845.3***	***829.6***	***813.9***	***853.5***	***904.1***	***974.5***	***1029.9***	***996.8***	***984.6***	***995.6***
US	164.1	195.5	209.3	234.5	253.7	303.7	336.8	363.7	319.7	390.8	455.1	538.3	518.7	623.1	683.9	622.6	549.9	531.7
Japan	329.4	349.8	347.5	292.9	295.3	342.3	390.8	313.6	353.3	288.4	203.4	173.0	234.3	199.7	200.2	188.1	216.2	218.0
EU	151.9	148.1	165.7	117.5	106.2	70.7	83.7	58.0	78.3	54.6	61.9	46.4	49.2	55.2	48.8	64.4	65.5	71.1
Other	66.5	64.6	54.0	58.5	73.0	86.0	99.7	112.9	94.1	95.8	93.5	95.8	102.0	96.5	97.0	121.7	153.0	174.8
Imports	***87.8***	***94.9***	***87.1***	***93.1***	***101.6***	***158.6***	***216.7***	***278.6***	***292.2***	***252.4***	***310.6***	***424.2***	***517.0***	***481.2***	***454.0***	***425.9***	***427.6***	***431.6***
US	41.6	44.4	43.5	45.7	45.4	64.8	83.5	125.5	107.2	94.2	116.0	182.8	214.9	198.2	192.5	178.2	175.6	173.9
Japan	5.2	4.0	2.2	1.4	1.1	1.5	2.8	2.0	3.5	3.9	3.1	4.3	4.2	2.9	3.3	3.0	3.6	3.8
EU	6.2	4.7	6.0	6.1	5.1	5.5	9.9	15.5	22.1	17.8	13.2	26.7	35.8	25.2	16.5	9.9	9.9	11.8
Other	34.8	41.8	35.4	39.9	49.9	86.8	120.4	135.6	159.4	136.6	178.3	210.4	262.1	254.8	241.7	234.7	238.6	242.0
Balance	***624.0***	***663.0***	***689.5***	***610.3***	***626.6***	***644.0***	***694.3***	***569.7***	***553.2***	***577.2***	***503.3***	***429.3***	***387.1***	***493.3***	***575.9***	***570.9***	***557.0***	***564.0***
US	122.5	151.1	165.8	188.8	208.3	238.8	253.3	238.3	212.4	296.7	339.2	355.5	303.8	424.9	491.4	444.3	374.4	357.7
Japan	324.2	345.9	345.4	291.5	294.2	340.7	388.0	311.6	349.8	284.6	200.3	168.7	230.1	196.8	196.9	185.1	212.6	214.2
EU	145.7	143.3	159.7	111.4	101.1	65.2	73.7	42.5	56.2	36.8	48.7	19.7	13.4	30.0	32.3	54.5	55.6	59.3
Other	31.6	22.7	18.7	18.6	23.1	-0.7	-20.7	-22.7	-65.3	-40.8	-84.9	-114.6	-160.2	-158.3	-144.7	-113.0	-85.6	-67.2

Source: BC Stats

Country composition of EU has changed over time; data shown based on current definition

Table 9a: BC's trade in fish and seafood products, by country (annual % change)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Exports	***6.5***	***2.4***	***-9.4***	***3.5***	***10.2***	***13.5***	***-6.9***	***-0.3***	***-1.9***	***-1.9***	***4.9***	***5.9***	***7.8***	***5.7***	***-3.2***	***-1.2***	***1.1***
US	19.2	7.0	12.1	8.2	19.7	10.9	8.0	-12.1	22.3	16.4	18.3	-3.6	20.1	9.8	-9.0	-11.7	-3.3
Japan	6.2	-0.7	-15.7	0.8	15.9	14.2	-19.8	12.6	-18.4	-29.5	-15.0	35.4	-14.8	0.2	-6.0	14.9	0.8
EU	-2.5	11.9	-29.1	-9.6	-33.5	18.4	-30.6	35.0	-30.4	13.4	-25.0	5.9	12.2	-11.5	32.0	1.6	8.7
Other	-2.9	-16.3	8.2	24.9	17.8	15.9	13.2	-16.7	1.8	-2.4	2.5	6.4	-5.4	0.5	25.4	25.8	14.2
Imports	***8.1***	***-8.3***	***6.9***	***9.1***	***56.2***	***36.6***	***28.6***	***4.9***	***-13.6***	***23.0***	***36.6***	***21.9***	***-6.9***	***-5.7***	***-6.2***	***0.4***	***0.9***
US	6.8	-2.1	5.1	-0.5	42.7	28.7	50.3	-14.6	-12.2	23.1	57.6	17.6	-7.8	-2.9	-7.4	-1.5	-0.9
Japan	-23.1	-45.6	-34.8	-23.0	40.6	86.1	-28.9	72.2	11.4	-19.7	38.6	-2.3	-30.7	13.2	-8.5	17.6	6.2
EU	-23.5	27.3	1.2	-16.0	7.1	80.7	56.5	42.4	-19.6	-25.8	102.3	33.9	-29.6	-34.6	-39.7	-0.2	19.2
Other	20.0	-15.4	12.7	25.2	73.8	38.8	12.6	17.5	-14.3	30.6	18.0	24.6	-2.8	-5.2	-2.9	1.7	1.5
Balance	***6.3***	***4.0***	***-11.5***	***2.7***	***2.8***	***7.8***	***-18.0***	***-2.9***	***4.3***	***-12.8***	***-14.7***	***-9.8***	***27.4***	***16.7***	***-0.9***	***-2.4***	***1.3***
US	23.4	9.7	13.9	10.3	14.7	6.1	-5.9	-10.8	39.6	14.3	4.8	-14.5	39.9	15.6	-9.6	-15.7	-4.4
Japan	6.7	-0.1	-15.6	0.9	15.8	13.9	-19.7	12.3	-18.6	-29.6	-15.8	36.4	-14.5	0.1	-6.0	14.9	0.8
EU	-1.6	11.4	-30.2	-9.3	-35.5	13.2	-42.4	32.2	-34.6	32.4	-59.5	-32.0	123.6	7.9	68.6	1.9	6.8
Other	-28.1	-17.9	-0.4	24.1	-103.2	2745.2	9.5	187.9	-37.5	108.0	35.1	39.7	-1.1	-8.6	-21.9	-24.3	-21.4

Source: BC Stats

Country composition of EU has changed over time; data shown based on current definition

Table 10: Establishments in BC, by industry

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Fishing Industries	***718***	***709***	***753***	***732***	***728***	***760***	***718***	***687***	***580***	***629***	***636***	***611***	***616***	***593***	***560***	***571***
Commercial Fishing	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	454	505	513	502	504	487	454	465
Aquaculture	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	126	124	123	109	112	106	106	106
Fish Processing	***85***	***82***	***91***	***91***	***98***	***104***	***110***	***133***	***159***	***153***	***156***	***141***	***131***	***122***	***125***	***124***
Boat Retailing, Guide Outfitting & Marinas	427	455	479	469	483	489	484	500	502	536	555	546	550	540	519	511
Accommodation	1,987	2,022	2,046	2,124	2,179	2,184	2,285	2,220	2,171	2,110	2,122	2,108	2,071	2,032	2,015	2,027
Food Services	5,857	6,316	6,783	7,342	7,862	8,268	8,582	8,959	9,370	9,335	9,525	9,450	9,491	9,636	9,586	9,603

Source: Statistics Canada Business Register

Establishments with no employees are not included